McNAIR PAPER

45

Deterrence Theory: Success or Failure in Arab-Israeli Wars?

Elli Lieberman

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE **OCT 1995**	2. REPORT TYPE **N/A**	3. DATES COVERED **-**
4. TITLE AND SUBTITLE **Deterrence Theory: Success or Failure in Arab-Israeli Wars?**		5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S) **Elli /Lieberman**		5d. PROJECT NUMBER
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **National Defense University Institute for National Strategic Studies Fort McNair Washington, DC 20319**		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY STATEMENT **Approved for public release, distribution unlimited**		
13. SUPPLEMENTARY NOTES		
14. ABSTRACT		
15. SUBJECT TERMS		

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**UU**	**88**	

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

A popular Government,
without popular information or the means
of acquiring it,
is but a Prologue to a Farce or a Tragedy;
or perhaps both.
Knowledge will forever govern ignorance;
And a people who mean to be their own
Governors,
must arm themselves with the power
which knowledge gives.

JAMES MADISON to W. T. BARRY
August 4, 1822

DETERRENCE THEORY: SUCCESS OR FAILURE IN ARAB-ISRAELI WARS?

ELLI LIEBERMAN

McNair Paper 45
October 1995

INSTITUTE FOR NATIONAL STRATEGIC STUDIES
NATIONAL DEFENSE UNIVERSITY
Washington, DC

From time to time, INSS publishes McNair Paper monographs to provoke thought and inform discussion on issues of U.S. national security in the post–Cold War era. These monographs address such current matters as national security strategy and policy, defense resource management, international affairs, civil-military relations, military technology, and joint, combined, and coalition operations.

For sale by the U.S. Government Printing Office
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328
ISSN 1071-7552

Contents

DETERRENCE THEORY: SUCCESS OR FAILURE IN ARAB-ISRAELI WARS

INTRODUCTION

Rational deterrence theory provides scholars with an explanatory framework which specifies the requirements for the success and failure of deterrence.[1] Yet, conclusive empirical evidence that deterrence successes occur has eluded deterrence theorists.[2] According to Richard N. Lebow and Janice G. Stein, the main critics in the most recent challenge to deterrence theory,[3] the empirical evidence suggests that deterrence rarely succeeds.[4] They argue that a review of international incidents over the last ninety years reveals only three cases of extended immediate deterrence success. Based on this review, as well as on their own empirical investigations, Lebow and Stein conclude that deterrence rarely succeeds and that leaders, because of political vulnerabilities, challenge deterrence even when the defender's threats are credible. Lebow and Stein argue that "among the most important findings with respect to the dependent variable is the seemingly elusive and fragile nature of the success of immediate deterrence."[5]

If Lebow and Stein's interpretation of events is correct, then the "weakness thesis," a variation on the "scapegoat hypothesis" or the "diversionary theory of war,"[6] poses a serious challenge to deterrence theory. If a challenger is compelled by domestic or international weakness to challenge deterrence despite the credibility of the defender's threat, or to stand firm and not back down during a crisis for fear of losing face, then deterrence policies are indeed irrelevant and even counter-productive; instead of preventing war they lead to war. Under such circumstances deterrence theory would fail to account for deterrence outcomes and would be a poor conflict management tool. This conclusion, if supported by a closer analysis of the evidence, would pose a serious dilemma for decision-makers in status-quo states. It suggests that the international sys-

tem contains a group of "non-deterrable" states and that a defender's use of deterrence is unlikely to succeed. The implications of this conclusion for U.S. policy makers in the post Cold War era would be serious because the United States is most likely to be confronted, in the immediate future, by so called "non-deterrable" conventional regional powers.

Lebow and Stein's conclusion is based to a large extent on their investigation of cases of deterrence failure in the Middle East—the 1969 War of Attrition and the 1973 Yom Kippur War between Egypt and Israel.

This paper examines Lebow and Stein's conclusion that deterrence successes rarely occur and that leaders challenge deterrence, despite the defender's credible threats, because of political vulnerabilities. It argues that a flawed research design is the reason for Lebow's and Stein's inability to find support for the postulates of deterrence theory. The phenomenon of deterrence, which is temporal, dynamic, and causal, has to be tested by a longitudinal research design and not by research designs that focus on "snapshots" of single deterrence episodes. Stein's analysis of the War of Attrition and the Yom Kippur War ignores the important period between the June 1967 Six Day War and the War of Attrition as well as the larger, enduring Egyptian-Israeli rivalry which goes back to the 1948 war.

By investigating the role that deterrence played in the enduring conflict between Egypt and Israel from 1948 to 1977, and by focusing on the role that reputation and learning play in overcoming the credibility problem, one can demonstrate that, contrary to Lebow and Stein's claim, deterrence stability can be created even in the more difficult cases in which both challenger and defender "seriously" intended to attack and defend.[7] Leaders challenge deterrence, or go to war, when there are uncertainties about the capability or will of the defender; and, once these uncertainties are reduced through the creation of specific reputations for capability and will, deterrence stability is created even when political pressures to challenge deterrence continue to exist. The observed correlation between weakness and the decision to challenge deterrence, documented in Lebow and Stein's case-studies, does not reflect a direct causal connection between the two. Rather, this paper argues that weakness (of either state) is not a sufficient cause for war, that leaders do not miscalculate the balance of capability because of political pressures to act, and that challenges occur when weakness and opportunity coincide.

A closer examination of the War of Attrition and the Yom Kippur War suggests that deterrence theory is supported by the evidence and that even highly motivated challengers are deterrable if the defender's threat is credible. The paradoxical, or counter-intuitive, finding that emerges from

this study is that, in the conventional world, to prevent wars a state may have to fight wars because the requirements of deterrence—*stability* (a credible threat based on demonstrated capability and will), can only be created through the ultimate test of capability and resolve—*war*.

This paper is divided into two main sections.[8] In the first section I re-examine Stein's arguments on the War of Attrition; and in the second section I re-examine her arguments on the Yom Kippur War. In the conclusion I consider the theoretical and policy implications of the findings.

1.
"DESIGNING AROUND" I: THE "WAR OF ATTRITION," SUCCESS OR FAILURE?

The War of Attrition is used by critics of deterrence to illustrate the fragility of deterrence because Egypt began to shell Israeli positions on the Suez Canal only a few months after Israel's stunning victory in the June 1967 Six Day War. In contrast to the 11 years of deterrence success brought about by the 1956 war, deterrence held after the 1967 war for only two and one-half months. Despite the fact that Israel unambiguously established its military superiority by destroying the armies of three Arab states in the Six Day War and by occupying large parts of their territories, Egyptian forces began shelling Israeli positions on the East bank of the Suez Canal in September 1967. On October 21, the Egyptian navy sank the Israeli destroyer INS Eilat. After an Israeli retaliation in which oil installations and refineries were attacked, the Egyptian-Israeli front was quiet for a year. Then, in September 1968 Egypt began massive artillery shelling of Israeli positions accompanied by troop crossings of the Canal. This stage lasted until the end of October, and, as in the previous round, Israeli retaliation brought about four months of stability. In March 1969 Egypt began a costly war of attrition, commonly referred to as the War of Attrition, which lasted until August 1970.[9]

This case appears to lend support to the contention of critics of deterrence that leaders who act out of "need" challenge deterrence despite the credibility of the defender's threats. Stein, a major critic of deterrence theory, argues that deterrence theory fails to explain the War of Attrition because Egypt, the militarily weaker party, challenged deterrence and resorted to the use of force by launching the War of Attrition in March 1969. This occurred despite the fact that the intelligence services of the United States, the Soviet Union, Egypt, and Israel, all agreed that Egypt's military capability was inferior to that of Israel.[10] According to Stein, Israel's deterrent strategy failed badly.[11]

While Egyptian leaders were aware of Israel's overall military superiority, which they took into account when they designed their strategy, the challenge they embarked upon was, according to Stein, ill-conceived. It was based on many miscalculations which defeated deterrence. According to Stein, Egyptian leaders "underestimated Israel's interests and consequently miscalculated the scope of its response."[12] Because Israel's interests were bargaining chips to be traded at the negotiating table while Egypt was fighting for her own homeland, Egyptian leaders expected Israel to acquiesce in response to a prolonged and costly military stalemate.

In addition, Egyptian leaders overestimated their capability and underestimated that of Israel to react. They planned a local war to "design around"[13] Israel's superiority in mobile warfare but the later stages of their plan called for crossing the canal and capturing parts of the Sinai. If their plan had succeeded, the war would have degenerated into a larger one where Israel's superiority was unambiguous. Egyptian leaders also expected to inflict massive Israeli casualties, but anticipated only limited Israeli response. Finally, according to Stein, Egyptian leaders underestimated Israel's capacity for endurance and overestimated Egyptian capability to inflict casualties.[14]

These contradictions, according to Stein, can be explained "only by some dynamic of wishful thinking." Stein argues that,

> the biased estimates stemmed rather from processes of inconsistent management in response to an extraordinarily difficult and painful value conflict: Egypt could neither accept the status quo nor sustain a general military challenge. In seeking to escape this dilemma, Egyptian leaders embarked on a poorly conceived and miscalculated course of military action rather than acknowledge the value conflict and make the difficult trade-offs. In 1969 Israel's deterrent strategy failed not because it was badly designed but because Egyptian calculations were so flawed that they defeated deterrence.[15]

Stein's central argument is that leaders who are under political pressures to act deny unpleasant value trade-offs. Being under pressure to act, leads leaders to miscalculate the balance of capability and resolve. They underestimate the capability of the defender and exaggerate their own power. They also pay attention to their own interests, interests that are psychologically salient, rather than to those of the opponent. The status quo is so intolerable that it promotes motivated errors like wishful thinking and

denial in an effort to escape an intolerable dilemma. This form of bias defeats deterrence.

The problem with this line of argument is that it fails to identify the true causal chain in explaining deterrence failure. By focusing only on deterrence failures and analyzing deterrence outcomes in isolation from the larger processes that exist in an enduring rivalry, Stein reaches flawed conclusions about the causes for the deterrence failure in March 1969. Stein begins her analysis of deterrence failure in March 1969 while completely ignoring the larger context in which the Egyptian-Israeli interaction takes place. The period up to the 1967 war, the two deterrence failures which occurred in 1967 and 1968, as well as the periods of stability that existed between the different deterrence failures, are not mentioned or discussed in her analysis. If the Egyptian miscalculations were a result of wishful thinking due to political pressures to act, as Stein suggests, then it is difficult to explain why Egypt did not challenge deterrence in the other periods in which the front was quiet. In all of these periods Nasser was under the same political pressures to act. If need led to miscalculation and war in one case why did it not lead to the same outcome in the other cases?

I argue that Egypt's choice of a strategy of attrition was sensible under conditions of uncertainty and not motivated by wishful thinking, that the decisions to challenge were based on changes in opportunities rather than in response to need, and that the choice of attrition strategy, given the limited goals Egypt pursued after the 1967 war, are indicative of success and not failure. Thus, the deterrence model does provide a useful framework that predicts the conditions under which deterrence success and failure occur.

What the Egyptian strategy in the War of Attrition was and how the postulates of deterrence theory fare in this case are the questions to which we now turn. The analysis will proceed along the framework used in the previous chapters where the competing empirical predictions made by the deterrence model and by the critics of deterrence will be examined on the balance of interests, the balance of capability, reputations, and crisis bargaining behavior.

Balance of Interests

Competing Hypotheses

The deterrence model predicts that if the balance of interests favors the defender deterrence should hold. The valuation of interests determines the will of the defender to respond to a challenge and bear the costs

entailed in preserving its interests. Deterrence theorists and critics of deterrence alike agree that certain intrinsic interests are so important to some defenders that the credibility of their will to protect those interests is unquestioned. Challengers are not expected to challenge deterrence when they estimate the defender's resolve—and commitment to retaliate if challenged—to be high. Some critics of deterrence, who are strong proponents of the balance of interests school, argue that rational deterrence theory places too much emphasis on strategic interests such as reputation and credibility, and should pay more attention to intrinsic interests which are more likely to deter.[18]

Critics of deterrence argue that leaders are likely to pay attention to their own interests, interests that are psychologically salient, rather than to those of the opponent. If they do engage in a comparison of interests, leaders under political pressure to act are likely to underestimate the worth of the adversary's interests and overestimate the value they attach to their own interests.[19]

The consequence, argue critics of deterrence, is that leaders in challenging states are likely to miscalculate the defender's response. First, challengers are likely to anticipate that the defender, when challenged, will back down rather than fight. Second, if the challenger decides on a direct attack, he might be certain of the defender's response but uncertain about the defender's endurance and will to escalate. The challenger is uncertain about the defender's will to undertake the risks and costs associated with escalation and brinkmanship.

Egypt's and Israel's Interests During the War of Attrition

What was the balance of interests in the War of Attrition? Did Egypt evaluate the balance correctly? If not, did that affect its estimation of Israel's response? Did learning take place? The 1967 war changed the balance of interests. In that war Egypt (as well as Syria and Jordan) lost territories it considered an integral part of its homeland. Freeing the Sinai from Israeli occupation became the primary goal of Egyptian decision makers. Egypt wanted to deny Israel the political and strategic gains that resulted from the 1967 war. Egypt feared the establishment of a new status-quo based on these gains, as well as the erosion of its leadership position in the Arab world.[20]

Israel's interest was to keep the Sinai until the Egyptian government recognized Israel's right to exist and agreed to sign a peace treaty achieved through direct negotiations. In contrast to Judea and Samaria which some segments of the Israeli polity desired for ideological reasons,

Israel's claim to the Sinai was only strategic. The Sinai was a bargaining chip that Israel hoped to be able to trade at the bargaining table in return for a peace treaty with Egypt.[21]

Both Egypt and Israel were aware that the balance of interests favored Egypt. Egypt was fighting for the "soil of the homeland," while Israel was fighting for strategic interests.[22] Both sides also agreed about the consequences of such a balance. Egypt was highly committed to recapture the Sinai and would be willing to pay a high price in human and material resources while Israel would wonder why it should lose people over territories from which it was willing to retreat. Both parties realized that Israel would find itself in the difficult position of having to mobilize the scarce resources of a small nation and convince its population to spill blood for bargaining chips.[23]

Egypt's and Israel's Strategies and Secondary Interests

What courses of action were available to Egypt to regain the Sinai? This is important to consider briefly because any strategy Egypt would have adopted had an impact on, and created, secondary interests. First, Egypt could have accepted the Israeli offer to trade land for peace through direct negotiations. A week after the war Israel offered to return Egypt the Sinai and withdraw to the international boundary in return for a peace treaty. The only condition the Israelis attached to their offer was that the Sinai be demilitarized. This offer was on the table until October, 1968.[24]

Egypt could not accept a peace treaty with Israel because it perceived such an outcome as surrender to the dictates of Israel in light of a humiliating defeat. This perception existed not only in Egypt, but in the rest of the Arab world as well. The fear in Egypt was that the acceptance of a peace treaty would be used politically to further undermine Egypt's position in the Arab World, especially because Israel did not offer to withdraw from the West Bank and Jerusalem.

Egypt also had a psychological interest in denying the 1967 defeat. Accepting the status-quo or a peace treaty with Israel immediately after the defeat would be synonymous with admitting that the last 15 years of the socialist revolution had failed. Accepting peace would mean that "Arab Nationalism" and "Egyptian Socialism" lost to the forces of "Imperialism" and "International Zionism." For a leader who became a symbol of, and dedicated a lifetime to, the resistance of "Imperialism" and "International Zionism" accepting peace with Israel and cooperating-with the United States meant surrender. Thus, the option of regaining the Sinai through a peace treaty was rejected.[25]

The second option, recapturing the Sinai by force, was not a viable option. As a result of the 1967 war, the Egyptian leadership realized that Israel could not be easily defeated in an all out war and that to counter certain Israeli capabilities would take years.[26]

The third option, a replay of the 1956 events when the United States pressured Israel to return the Sinai, was a course of action that Egypt hoped would work again. If that failed, Egypt hoped that Western European countries would pressure the United States to pressure Israel to return the Sinai because they had an interest in keeping the Suez Canal open to insure the flow of oil. This strategy also failed to occur. The United States decided not to pressure Israel in the absence of a peaceful arrangement. And, the Western European states learned to cope with the closure of the canal and did not put pressure on Israel to withdraw.[27] The international situation, as well as Israel's ability to withstand international pressures, were much different in 1967 than they were in 1957.

Thus, given Nasser's life-long political commitments, the balance of capabilities that prevailed after the 1967 war, and the particular international situation at the time, the only course of action still available to regain the Sinai was a war of attrition. The war's main objective was to attrit Israel militarily and psychologically. Given Israel's limited resources and its sensitivity to casualties a war of attrition would put to a test Israel's ability to accept high costs in men and material for less than vital interests. Israel would be made to pay dearly for maintaining the status quo.

The War of Attrition had other secondary benefits. First, Israel's main line weapon systems and reserves would be destroyed and attrited, so, when the time for a general war arrived, Israel would find itself in a weakened position.[28] Second, it would increase Israel's dependence on the United States which in turn would increase the United States' leverage over Israel.[29] In order to force the United States to pressure Israel, Egypt had to create, and try to manipulate, the direct interests of the United States that were threatened by Israel's actions. Egypt found such interests in the risk of global confrontation and the weakening political positions of Arab regimes allied with the United States.

The War of Attrition also signaled Egypt's refusal to admit defeat. [30] Nasser still refused to accept the 1967 defeat as a real test of the balance of capabilities between Israel and the Arab states. Ultimately, he hoped, the potential of the Arab states in the number of people, in economic resources, and in other political and strategic resources would manifest itself in the balance of capabilities, and Israel would be defeated. If the particular circumstances which led to the 1967 defeat—the military sur-

prise, the unfriendliness of the United States government and the mistakes made by the Soviets and the Egyptians—did not exist, Nasser believed that through attrition, as a first stage in a prolonged conflict, Egypt would eventually be able to achieve a military victory.

A war of attrition also had the advantage of providing the Egyptian army with the opportunity to confront the Israeli army on a daily basis and learn to fight it. This could be accomplished even through minor actions that would symbolize a refusal to remain defeated. Not only would the Egyptian army be forced to improve itself, but, in the process, the Egyptian leaders hoped, Israel's prowess would be demystified.[31] For a regime that relied on the army for its existence, this was tantamount to survival.

Another goal Egypt would achieve through a war of attrition was the maintenance of a respectable position in the Arab world. As long as Egyptian forces challenged Israel, other actors, particularly the Palestinians who were also challenging Israel through terrorist attacks in Israel and abroad, could not accuse Egypt of inaction.[32] On the positive side, challenging Israel in a war of attrition put pressure on other Arab regimes, countries on the eastern front were prepared to contribute to the war effort by fighting and alleviating some of the military pressures Nasser was under. Wealthy Arab states were prepared to contribute money.[33]

Finally, and most importantly, escalating the conflict with Israel introduced the risk of super-power intervention and global confrontation. Nasser hoped that American fears of such a confrontation would convince it to put pressure on Israel to acquiesce and withdraw. Being unable to bring about a replay of 1956 through diplomacy, Nasser believed that a war of attrition and escalation which introduced the risk of a global confrontation between the superpowers, might create the conditions that would lead to Israeli withdrawal.[34]

Given this list of Egyptian interests it is apparent that Egypt believed that once the war of attrition began, Israel's interest was to bring about a cease fire as soon as possible. By pacifying the border Israel hoped to reduce the United States' incentives to pressure it to withdraw in order to minimize the risks of a superpower confrontation. The problem the Israelis faced was that, given Egypt's interest in attrition, the only way they could hope to bring about a cessation of hostilities was by escalation. Only through escalation, "by attriting the attritors," could Israel prove to Egypt that its strategy would backfire. Through escalation Israel would minimize the costs it would suffer, it would not be attrited, and Israel would demonstrate its capability and resolve to fight for less than vital

interests. By demonstrating to the Egyptians that they would ultimately pay a greater price and end up being the attrited party, the Israelis hoped to convince them of the futility of their strategy. It is important to remember, however, that the escalation of the conflict entailed the risk of superpower intervention, which was not in Israel's interest; therefore, as we shall later see, Israel undertook escalatory steps with great caution and reluctance.[35]

We see, then, that in the War of Attrition the balance of interests changed. If in the previous three challenges Israel's intrinsic interests were at stake, in the War of Attrition it was the Arab states whose intrinsic interests were at stake. All the Arab states directly involved in the conflict lost territories they considered part of their homeland. Their motivation to challenge was indeed great. Their challenge is consistent with the balance of interests hypothesis put forward by the deterrence model.

From Israel's perspective the analysis was more complicated. The territories, with the exception of part of the West Bank and Jerusalem, were perceived as bargaining chips to be traded at the peace conference. Israel had an incentive to keep the territories until the Arab leaders agreed to negotiate a peace settlement. Would Israel fight to keep these territories until such a time? Would Israel escalate the conflict if Egypt embarked on a prolonged and costly attrition war? And at what costs? These were questions to which there were no certain answers at the beginning of the challenge.

Egypt's Perception of Israel's Strategic and Reputational Interests

In this case Egypt did engage in a comparison of interests and concluded that it was clearly favored. The Egyptians were fighting for their homeland while the Israelis were fighting for bargaining chips. The Egyptians were certain that Israel would retaliate. What was uncertain were the costs Israel was willing to accept for territories it was willing to concede at the bargaining table. Heykal wrote in 1969 that Egypt had an advantage in a war of attrition because Israel would be unable to handle a protracted and costly engagement. Israel's preoccupation with losses and sacrifices in a war that did not seem to be vital was noticed in Egypt. Nasser told a group of Western journalists that a nation which publishes the photographs of the previous day's casualties in the newspapers cannot win a war of attrition.[36]

Stein does not dispute the argument that, in the War of Attrition, Egypt engaged in a comparison of interests. She says, "as Egypt was

about to launch the War of Attrition, Heykal noted that the importance attached by Egypt to the return of the conquered territories was greater than Israel's readiness to defend the status quo."[37] Stein's criticism in this case is that Egypt underestimated Israel's strategic and reputational interests, and as a result miscalculated Israel's interest in escalation in order to stop an intolerable, prolonged, and costly war of attrition that was damaging to its deterrent reputation. Stein argues that Heykal's underestimation was motivated because it was an undesirable outcome.

There are several problems with this argument. First, it is historically inaccurate. Stein reaches her inaccurate conclusion because she begins her analysis of the War of Attrition in March 1969. While the period between March 1969 and August 1970 is usually referred to as the War of Attrition, two other periods of attrition warfare, from September 1967 to October 1967, and from September 1968 to October 1968, cannot be overlooked because they provide important evidence which leads to radically different conclusions. Stein's argument that in the War of Attrition the Egyptian leadership miscalculated the Israeli response and that this miscalculation was the result of motivated biases is not supported by the evidence when the longer term perspective is used.

The historical evidence suggests that during the two previous attrition periods prior to the last phase of the War of Attrition, Israel signaled clearly and forcefully its intention not to accept the rules of the game imposed on it by Egypt. She would not engage in a war of attrition that was advantageous to Egypt, but would retaliate and escalate deep inside Egyptian territory. In the first period, Israel responded by bombing oil refineries and installations, and cities along the canal. Israel signaled that it would hold the whole area west of the canal "hostage" to deter Egypt from further challenges. Egypt understood the signal that the continuation of the War of Attrition would be costly to civilian life in the canal cities and it signaled back that it was willing to pay that price by evacuating the area. By October, 1967 350,000 civilians, about 70 percent of the population, were evacuated. By November, 90 percent of the population were evacuated.[38]

The second stage of the War of Attrition, which began in September 1968, was a dress rehearsal for the phase that would begin in March 1969. During this phase, which lasted until the end of October 1968, the actors made preparations to absorb the type of punishments they planned to inflict on each other in the last stage. In response to massive Egyptian artillery attacks along the whole canal front and numerous crossings, Israel retaliated deep inside Egyptian territory by attacking bridges and power stations. Israel signaled that it would not tolerate attrition along the

Canal where Egypt had the advantage and would expose Egypt to deep penetration raids that would serve to demonstrate Egypt's inability to protect its homeland.

This signal was perceived and interpreted correctly by Egypt's Chief of Staff Fawzi who said that the Israeli retaliation in Naj Hamadi served as an alarm bell for him.[39] Fawzi placed early warning systems along the Gulf of Suez and created popular defense organizations to protect Egypt's interior. During the winter months of 1968 and until March 1969 Egypt made preparations to protect its interior from Israeli retaliation and escalation.

Further evidence that Egypt was expecting major Israeli escalation in response to Egyptian attrition along the canal can be seen in Sadat's admission that after Israel hit inside Egyptian territory, Egypt had to delay its response until March 1969 when the preparations for the defense of vital civilian infrastructure was complete.[40] Given these kinds of preparations for in-depth defense against Israeli retaliations it in difficult to accept the argument that Egypt miscalculated the scope of Israeli response.

There is also evidence that Heykal anticipated a strong Israeli response to the Egyptian offensive in 1969. In an article published in early April, Heykal argued that while the balance of forces still favored Israel, Israel was afraid that the balance would tilt in Egypt's favor and Israel was likely to strike forcefully at Egypt in order to intimidate it. In mid-April, Heykal also warned the Egyptians to be prepared for strong Israeli actions intended to demoralize and immobilize the Egyptian population.[41]

In addition, the argument that Egypt should have anticipated the scope of Israel's response disregards the constraints on escalation placed on Israel by virtue of the new circumstances that resulted from the 1967 war and the new balance of interests. While in retrospect Israel's escalation and successful use of its air force seem an obvious course of action that Egypt should have considered or anticipated, we ought to remember that Egypt believed Israel's interest was to pacify the canal without disproportionate escalation. Any such escalation, the Egyptians felt, had its limits in terms of its effectiveness and, would create the risk of superpower intervention and global war.

To stop the fighting Egypt believed Israel had two options. She could escalate, either by using ground forces on the west bank of the canal, or by using its air force. Escalation on the ground west of the canal had its limitations given the disparity in territory and populations between the two actors.[42] Heykal argued that because Israel did not have direct inter-

ests in the west bank of the canal its forces would not cross in retaliation against Egyptian artillery fire. Heykal thought Israel would have been drowned in a "sea of Arabs" had it done so.

Israel was reluctant to use its air force because it did not want to attrit its most decisive weapon systems on less than vital wars.[43] In addition, Israel was unaware of exactly how successful the air force would be against ground forces. Israel was as surprised by the success of its air force as were the Egyptians. The first use of the air force was made after much hesitation, and its use was not part of any larger conception of an offensive strategy. It is doubtful that Israel would have resorted to the use of its air force if it were not for its initial impressive success.[44]

Even if such an operation was successful, the outcome would have been unattractive from Israel's point of view. Any successful campaign which threatened the Egyptian regime would have triggered Soviet intervention and an American response. The American response would be in the form of pressures on Israel to make concessions that would bring about a cease-fire, concessions that would most probably not be in Israel's best interests. There is evidence that this outcome was indeed a major goal in Egypt's grand strategy.

Stein assumes that Egypt's strategy was to begin a war of attrition that would expand to a more general war which would have eventually led to the liberation of the Sinai. Under such a scenario, miscalculating the possibility that Israel would retaliate and escalate the conflict in order to prevent such a development could have been problematic. However, there is now evidence to suggest that the main goal of the Egyptian attrition strategy was not to lead in stages to a war of liberation, but to put pressure on the United States to force Israel to make concessions. According to Heykal,

> thus we shall see that the USA and the USSR cannot ignore what happens in the Middle East. If they do not succeed in moves to bring about real peace in the region, they will not be able to stand aside from the fighting that will inevitably ensue, fighting that will settle the fate of the region.[45]

An integral element in this strategy was Israeli escalation and Soviet intervention, without which the risk of a global confrontation was not credible.

We can see evidence for this line of thinking in Nasser's instructions to Fawzi, the Egyptian Chief of Staff, to tighten friendship and cooperation with the Soviet Union in order to make it feel responsible for the

1967 defeat. In addition, Egypt's strategy was not only to put pressure on the Soviet Union to resupply the Egyptian army with newer weapons, but also to engage the prestige of the Soviet Union as a reliable superpower that stands by its allies and provides them with reliable weapons. This line of thinking can be detected in the very early stages of Egypt's conceptualization of the best strategy to deal with the result of the Six Day War.[46]

Finally, Stein's argument that Egypt underestimated Israel's response given the challenge to its reputational considerations is inconsistent with its own line of attack on deterrence theory. Stein belongs to a group of scholars that criticize deterrence theory for placing too much emphasis on the importance of strategic and reputational considerations and too little attention on the analysis of intrinsic interests that are inherently deterring. The distinction between intrinsic and extrinsic or strategic interests made by critics of deterrence suggests the different levels of resolve states are likely to display in a confrontation. In this argument, there is the implication that states which defend their intrinsic interests are more likely to display higher levels of resolve than states that defend extrinsic interests. Thus, it should not surprise us if the Egyptians believed that they had greater stakes in the conflict and therefore would display a greater degree of resolve. With Egypt's intrinsic interests at stake and Israel's deterrent reputation threatened, the critics of deterrence's anticipation of a forceful Israeli response is not consistent with the distinction Stein and other critics of deterrence make about the relative importance of intrinsic and extrinsic interests.

Stein's argument that Egypt underestimated Israel's interest and consequently miscalculated the scope of its response is, therefore, inaccurate. Stein's analysis of the War of Attrition from March 1969 and her exclusion of the period preceding it, causes her to miss important historical information and reach misleading conclusions. Egypt anticipated a strong Israeli response during the War of Attrition and prepared for it. Egypt perceived and interpreted Israel's signals correctly and delayed the start of the War of Attrition until Egypt completed its preparations for defense. Egypt may have been surprised by the use and effectiveness of Israel's air force, but so was Israel. There were strong motivations for Israel not to escalate the conflict and not to use the air force. Since a conception of how to use the air force effectively did not exist in the minds of Israeli decision-makers, it is less surprising that it did not exist in the minds of the Egyptian decision makers.

Evidence that Egypt analyzed Israel's interests throughout the crisis and not just during the initial decision to challenge deterrence is plentiful. Once Israel began using its air force, Fawzi assessed Israel's motivation

correctly. He argued that Israel was worried that Egypt's confidence in its capability was rising as a result of its successes on the ground and that Israel's intentions were to demoralize Egypt and to destroy its forces west of the canal.[47] In another instance, during meetings with the heads of state from Jordan, Iraq, and Syria in September 1968, Nasser said that Israel's interest was to freeze the situation along the canal by using a cease-fire and, should that fail, to engage in violent retaliation.[48] In September 1969, Heykal analyzed the goals of the two nations and argued that the goals of the Israeli offensive were to force Egypt to spread its forces, to sidetrack Egypt's command from its main goal which was to plan for the next war, to demonstrate that Israel enjoyed freedom of action everywhere in Egypt, and to discourage the Egyptians from continuing the struggle. Heykal also interpreted Israel's flights over Cairo as an attempt to topple the Egyptian government and predicted an Israeli attack before the Rabat Summit meeting in order to embarrass Egypt.[49]

In short, Stein's argument that Egypt underestimated Israel's strategic and reputational interests, and as a result miscalculated Israel's interest in escalation, is not supported by the evidence that emerges when a longer term perspective of the conflict is taken into account. Egypt's decision to challenge in the War of Attrition is consistent with the predictions of the balance of interests. Egypt challenged because it felt strongly about the Sinai and it anticipated and planned for the Israeli reaction. The miscalculations that did take place were the result of uncertainty. Some outcomes took the Israelis as well as the Egyptians by surprise.

The Balance of Capability

Competing Hypotheses

The two theoretical frameworks make contradictory arguments about the role of capabilities in deterrence stability. Rational deterrence theory suggests that the short-term balance favoring the defender will insure stability. The strategy school within this theoretical framework suggests that the absence of a blitzkrieg option promising a rapid military victory will insure deterrence stability.[50] Costly wars of attrition, and limited-aim strategies that lead to stalemates, deter leaders from going to war.[51]

The critics of deterrence framework claims that challengers misperceive the balance and tend to exaggerate their own capabilities. Challengers are not likely to be influenced by the balance because they decide on challenging deterrence under political pressures to act.[52]

Stein's Critique of Egypt's Strategy

Stein believes that deterrence theory fails to explain the War of Attrition because Egypt, the militarily weaker party, challenged deterrence and resorted to the use of force. The War of Attrition is another example, according to Stein, that demonstrates that challengers miscalculated their capabilities.[53] Specifically, Egypt, according to Stein, made three miscalculations. First, Egypt correctly diagnosed its superiority in firepower along the canal but underestimated Israel's use of airpower. Egypt should have expected that Israel would escalate the war with airpower, but dismissed it, despite the fact that its strategy led logically to exactly such a development.

Second, the Egyptians chose a strategy of attrition in which they had an advantage in firepower, and the ability to absorb costs, but then designed a four-stage plan, which included crossing the canal, which would lead to a general war to liberate the Sinai. In a general war, as the Egyptians were fully aware, Israel had the advantage.

Finally the Egyptians overestimated their capacity to inflict casualties and underestimated Israel's capacity for endurance. Egyptian decision-makers planned to inflict casualties of 10,000 within a period of 6- to 8-weeks. Israel decided to use its air force after casualties reached an average of 150 casualties a month.

According to Stein, Egypt's biased assessment of the balance was caused by a sense of weakness. They could neither accept the status quo nor could do anything about it. To escape the dilemma they embarked on an ill-conceived course of action. According to Stein,

> in planning a strategy of local and limited war that would nevertheless culminate in a canal crossing, they denied unpleasant inconsistencies central to the analysis. In anticipating massive casualties among Israel's forces, casualties that would nevertheless provide only a limited military response, Egyptian analysts tolerated a logical contradiction in their expectations that can be explained only by some dynamic of wishful thinking...[54]

What was the balance of capabilities and how was it perceived by the actors? What was the Egyptian strategy? Most of Stein's criticism is contradicted by the evidence. First, as we saw partially in our discussion of the balance of interests, it was not illogical for Israel to refrain from using the air force. The Israeli decision-makers did not contemplate an extensive use of their air force. Second, Egyptian leaders were aware of their

capabilities, and their four stage plan was a wish list rather than a blue print with operational significance. Finally, while Egypt may have overestimated its capability to inflict punishment, it did not underestimate Israel's capability for endurance. Egypt's strategy was sensible under conditions of uncertainty and did not reflect wishful thinking due to political pressures to act.

The Balance of Capability in the War of Attrition

Let us turn to the balance of capabilities. In spite of the fact that during the 1967 war Israel destroyed more than half of Egypt's tanks and 356 out of 431 of its combat aircraft, within a year Egypt's forces pre-war levels. In terms of overall strength, Egypt was in 1968-69 in a much better situation than in 1967 because most of the weapons it received were newer. The Soviet Union was an important resource which enabled Egypt to rebuild its military strength in a very short time.[55]

Israel's overall strength was not seriously effected by the Six Day War and it did not need a massive rearmament program. Several changes, however, made Israel relatively weaker. First, while the territories Israel captured in the June war provided it with strategic depth that added a margin of security, the longer lines of communications made it difficult for Israel to transfer forces from one front to another and it had to design a force structure that, in case of a new war, could deal independently with each front. Thus, similar challenges required an expanded Israeli army. Second, the French embargo added an additional burden on Israel's resources, because Israel had to switch to American armaments, and to develop its own infant defense industry.[56]

According to Shimshoni, when one turns his attention to the local balance at the Suez Canal, and when one keeps in mind the limits on Israeli escalation, Egypt's decision to wage a war of attrition seems very reasonable. Just before the March 1969 cycle of the War of Attrition began, Egypt had 2 army groups. They had more than 500 artillery pieces and hundreds of mortars. Israel had two brigades and a small number of artillery pieces and mortars. The contemplation of limited crossings was also a sensible decision because even one Israeli division would not have been able to stop Egypt along the whole canal front.[57]

Furthermore, many of the elements which enabled Israel to overcome a situation of quantitative inferiority did not exist in the new circumstances that were created along the Canal. Israel found itself deprived of many of the conditions which enabled it to demonstrate its superiority. First, Israel could not mobilize quickly and stay mobilized for long.

Egypt could outspend Israel and keep a 200,000 man army mobilized. To match that, because of the population differences, Israel would have had to mobilize 7 percent of its population, a rate that it could not sustain for long. Second, Israel could not fight an offensive mobile war because the canal was a major barrier. Israel's advantage in command, control, communications and organization could not effect the numerical balance in a static war. Israel's superior intelligence warning systems and its superior technology also could not play an important role in static warfare.

The option of escalating the war and crossing the Canal to destroy the Egyptian army was not very promising, not because Israel lacked the capability to execute such a campaign but because the benefits seemed dubious. Israel's successes would be costly and its forces could "drown in a sea of Arabs." In addition, if Israel were very successful, such action might have invited direct Soviet intervention to save the Egyptian regime.

Nasser was aware of Israel's capability to embark on such a campaign but also noted its lack of interest in crossing to the west bank of the Canal. In a conversation held by the leaders of Egypt, Jordan, Syria, and Iraq on September 1, 1969, the Vice Premier of Iraq, el-Amash, talked about the Arab campaign in terms of a long, continuous, and dangerous struggle which could even result in the loss of the Jordanian and Syrian capitals: Aman and Damascus. Nasser responded that this was not a possible scenario because it would not be in Israel's interests to do so and not because it did not possess the capability.[58]

Israel's Use of Its Air Force

The only option left for Israel to neutralize the quantitative advantage of the Egyptians along the Canal was to use its air force. But contrary to Stein's argument, the Egyptian expectation that Israel would not be able to use its airpower decisively was reasonable. First, Israel was reluctant to attrit its air force in less than vital wars.[59] Heykal noted the effect a war of attrition would have on the Israeli air force when he said "the aircraft will be in constant need of maintenance due to extensive use...the aircraft will be continuously exposed to being shot down."[60] Second, as I mentioned earlier, neither the Egyptians nor the Israelis believed that airpower would be effective against protected ground targets, nor did they anticipate the ease with which the Israeli air force could penetrate into Egypt.[61] This too was perceived by Heykal who argued that,

> aircraft may be effective in strategic operations but in tactical operations, without the conditions of comprehensive war, the effect will be limited, particularly on fighters who are helped by the nature of the ground on which they are fighting and by their training to protect themselves against air attacks.[62]

Furthermore, by early 1969, Egypt had a radar and surface-to-air missile (SAM) system in place, Soviet advisers, and 300 newly trained pilots, who completed their training by March 1969.[63] All that Egypt needed to accomplish, in order to succeed with its attrition strategy, was to have the ability to deny the Israeli air force free action over the Canal. The Egyptian leadership believed they had this capability.

We need to recall that the 1967 war did not involve extensive use of radar and SAMs; and the Israeli capability to neutralize their effectiveness was not known.[64] In addition, in 1967 Israel destroyed most of the Egyptian air force on the ground. How successful Israeli pilots would be in aerial combat against Egyptian pilots was not as well established. Finally, Israel did not receive supersonic jets until the fall of 1969.[65] We see, then, that a war of attrition was a sensible strategy from Egypt's point of view given the balance of capability along the Canal.

The Relationship Between Strategy and Objectives in Egypt's Strategy

What about Stein's other criticism that Egyptian leaders miscalculated the relationship between military objectives and strategy in that their four-stage plan led to a general war in the Sinai where all of Israel's advantages would come into play when the Egyptian strategy was to design around Israel's advantages? To answer this question we need to ascertain whether Egypt's four-stage plan led to a general war, which it did not; and whether the more limited goal Egypt set for itself, limited crossings that would lead to Superpower intervention to freeze the situation in place and strengthen Egypt's bargaining position, were perceived as attainable in the short run or as distant goals.

In March and April 1969, Heykal published a series of articles which offered the political strategic rationale for the struggle that Egypt embarked upon in the War of Attrition. Egypt's main goal was to undermine Israel's confidence in its ability to sustain a prolonged struggle by attriting its army and introducing the danger of a global confrontation that would trigger superpower pressure on Israel to withdraw. Egypt's strategy, Heykal argued, should be to win a decisive victory over Israel, in

which Israel would lose 2 to 3 divisions and suffer more than 10,000 casualties. This would be the last phase of a four-part plan in which Egypt first used massive artillery barrages to be followed by small scale crossings and later larger scale crossings.[66]

Two elements in the plan are crucial in terms of the clues that they give us about Egyptian thinking on the feasibility of the plan. One is the description of the final goal not only in terms of what was hoped for, but also in terms of what was omitted, and the other is the time table for the execution of the plan. Heykal's suggestion that Egypt should win a decisive victory over Israel, in which 2 to 3 divisions were destroyed and more than 10,000 casualties were caused, referred to a major military engagement but failed to mention that this outcome would be the result of a general war. The campaign Heykal discussed was limited in its goals and scope. It would aim at removing Israeli forces from the Canal even if the end result was a withdrawal of a few kilometers. The goal of the operation according to Heykal was to "force the Israeli army to retreat from the positions it occupies to other positions, even if only a few kilometers back."[67] Heykal talked more in terms of a psychological victory that would destroy the Israeli myth of invincibility which in turn would lead to serious rifts in Israeli society, as well as desirable changes in Western attitudes.

Heykal did not claim in his article that the fighting which took place in March 1969 was the beginning of the campaign he advocated and was careful to warn his readers that even the more limited goals of winning one major campaign against Israel could realistically be attained only in a very distant future. Heykal said, "what is now taking place on the Arab fronts is closer to being the beginning of the beginning. The next part of the road will be rough beyond imagination."[68] Thus, a major war was not planned and even a major engagement was not perceived as something the Egyptians could realistically win in the short term.

There is much evidence to suggest that the goals the Egyptian leaders set for themselves were discussed in terms of years rather than months. In 1967 Nasser told his war minister, Fawzi, to prepare the Egyptian army to liberate the Sinai through war in three years. But, according to Heykal, Nasser was not sure that this was a realistic goal. In a speech to his commanding officers, Nasser said that he originally thought that preparations for a military campaign against Israel would take months, then three years, and in the end he realized that five years was a more realistic target. As early as February 1968 Nasser was fully aware of two Israeli advantages that Egypt would not be able to overcome easily. One was Israel's air force and the other was U.S. support for Israel. Nasser admit-

ted on many occasions throughout 1968 that Egypt had achieved a situation in which it was able to defend herself but was not able to challenge Israel.[69]

When the March 1969 phase of the campaign began, Nasser was still very careful in his characterizations of the war. When asked when the major campaign would begin he said that in all honesty he could not answer that question. He did not portray the the initial phase of the War of Attrition as the beginning of the campaign and argued that Egypt ought to be careful not to be dragged into a war prematurely.[70] In May 1969 Nasser was still cautious and called for restraints.[71] In a government meeting on April 15, 1969, Nasser talked about Egypt's preparations for confronting Israel and called for only limited crossings. In Fawzi's summery of the elements of Egypt's new strategy there is no mention of major crossings into Sinai.[72] Thus, even before Israel demonstrated its capability to counter the Egyptian strategy the Egyptian decision makers had very limited objectives in mind which they anticipated to be able to achieve realistically only in the long run.

Another piece of evidence that suggests that Nasser did not plan for a general war can be seen in the nature of the decisions that were reached in the meeting of Arab leaders on September 1, 1969. While at the general level it was agreed by the participants to destroy the Israeli forces and return to the 1967 borders, the operational plans called for securing the present defense lines and stopping and destroying the attacking enemy forces. According to Heykal, under the most favorable conditions, and if there was good coordination with the other Arab states (the eastern front states) then the Arabs would be ready for war by March 1971.[73] In Heykal's articles from the summer and autumn of 1969 he talked about Egypt's will to sustain the sacrifices needed for its goal but did not mention that Egypt had reached any turning point in which it could assume a full-scale war. After the Israeli air strikes, the only turning points Heykal mentioned were the need for Egypt to win the psychological war.

Finally, Stein's argument about Egypt's miscalculation of the relationship between its military objectives and strategy is inconsistent with the evidence about Egypt's ultimate goals. There are two versions of Egypt's interests. One assumes that Egypt wanted to use the military option to pressure Israel to return eventually to the June 1967 borders. The other argues that Egypt's strategy was to attrit Israel, but more importantly, to create the conditions in which the United States would pressure Israel to return the Sinai. In the first case there is a contradiction between Egypt's strategy and goals, given that Israel would win a general war once the War of Attrition reached that stage. In the second scenario there is an

implicit recognition that Egypt was unable to force Israel to relinquish the territories, and, that the only viable strategy to achieve this goal was via the United States. In the latter scenario the talk of a general war served only as a stick with which to threaten the Superpowers that things could get out of hand and a rallying cry to satisfy domestic and regional audiences.[74] It was not taken seriously by the Egyptian leadership.

Thus the evidence does not support the argument that Egypt's plan was an operational blue-print that the Egyptian leadership took seriously. The final stages of the plan, the stage in which Egyptian forces liberated the Sinai, was a goal that, it was hoped, would one day be reached but was not attainable in the immediate future. Rather, the evidence suggests that despite the strong pressures to challenge, the Egyptian leadership made very accurate assessments of the balance of capability and designed its challenges to reflect changes in the balance.

The Role of Opportunity in Egypt's Decisions to Challenge

Another way to evaluate Stein's argument that the Egyptian leaders miscalculated because of political pressure to act is to check when the decisions to challenge were taken. A "need" model leads us to expect challenges even when the defender's threats are credible and the balance of capabilities favors the defender. An "opportunity" model leads us to expect that even under strong pressures to act challengers will take into consideration the balance of capability and act accordingly. A simple test demonstrates which proposition holds. Because "need" did not vary throughout the period under consideration, if the "need" hypothesis is true, we should expect challenges to have occurred throughout the period, and in a manner unrelated to capability considerations. If the "opportunity" argument is correct we should have expected capability considerations to play an important role in the decision to challenge. The evidence suggests that Egypt's behavior is more in line with an "opportunity," rather than a "need," model.

The first Egyptian challenge coincided with the completion of the "standing firm" or "active defense" stage of the Egyptian army, and the evacuation of the cities along the Canal. In the first six months following the end of the Six Day War, the Soviet Union replaced between 60 and 80 percent of the Egyptian armament lost in the war. By September 1967 Egypt could prevent an Israeli "walkover."[75] When Israeli retaliations placed Egypt's population along the canal at risk, Nasser decided on September 30—even before the massive Israeli shelling of the Suez refineries and oil installations on October 24, 1967—that Egypt would

begin the evacuation of the canal cities. But, despite the fact that Egypt no longer felt vulnerable militarily, it realized that it could not escalate the conflict or retaliate for the Israeli shelling of the oil installations.[76] And, indeed the front was relatively calm for a year.

Egypt completed the rehabilitation of its army to 1967 strength levels by September 1968. In July 1968 Nasser admitted publicly that Egypt had not yet reached military superiority over Israel. But the Egyptian commanders felt confident enough to deal with the Israeli retaliations. According to Sadat, Egypt completed its line of defense by September 1968 when the decision to start shelling Israeli positions was made.[77] This stage, too, was short-lived because Israel, deprived of its ability to hit the cities along the canal, escalated by attacking deep inside Egyptian territory. Fawzi and Sadat claimed that Egypt had to wait until March 1969 to begin the last phase of the War of Attrition because they needed the time to complete the civil defense organization. As a result of the Naj Hamadi raid, Egypt announced the establishment of the Popular Defense Organizations to defend installations and other objectives throughout Egypt.[78] Most importantly, though, the implementation of the Egyptian plan for the War of Attrition was timed to start in March 1969 because by then the Egyptian air force had completed its training and rebuilt its strength. By March, 300 newly trained pilots returned from the Soviet Union and were available for combat.[79]

Egypt's decision to initiate a war of attrition was not so misguided as Stein suggests. Rather than making that decision in response to a painful value conflict, Egypt's strategy was based on a sound analysis of the new military realities. Egypt had two major resources which could not be easily neutralized: its population base, and arms transfers from the Soviet Union. By 1968, Egypt's army was restored to its pre-war level with newer tanks and aircraft. Egypt's miscalculation of the effectiveness of Israel's air force was reasonable given the improvement of Egypt's air force by the addition of the newly trained pilots, and given Egypt's correct understanding of Israel's reluctance to attrit its air force, or to escalate the conflict. If the Israelis were surprised by the effectiveness of their air force against ground forces, it is difficult to argue that Egypt's miscalculation was the result of political pressures to act. Finally, Egypt did not plan a war that was supposed to degenerate into a general war, and was careful to tailor its strategy to changing capabilities. Again, it takes a longer term perspective that does not overlook the 1967 and 1968 deterrence failures to reach a more accurate conclusion about the calculations of the Egyptian leadership.

Reputations

Why did Egypt Challenge Despite Israel's Reputation for Brinkmanship?

By the end of the 1967 war, Israel had established strong reputations for capability and will. The 1967 victory was impressive and left little doubt in the minds of the Arab leaders about the capability of the Israeli army. The 1956 and 1967 wars also demonstrated Israel's willingness to escalate and go over the brink if necessary even for less than existential challenges. Why, then, did Egypt challenge in the War of Attrition? This challenge demonstrates the limits of a general reputation for toughness, or for valuing a reputation in enhancing deterrence stability[80]. It demonstrates that, as critics of deterrence argue, reputations are context dependent and that specific reputations for capability and will are important for deterrence stability.[81] The 1967 war changed the structure of the interests at stake, as well as the conditions in which the Israeli army demonstrated its superiority. The new frontiers created new uncertainties about Israel's will and capability which made the general reputations developed by 1967 irrelevant to the new circumstance.

In 1956 and 1967 Israel demonstrated the will and the ability to escalate and go to war in order to protect its vital interests and its deterrent reputation. The two challenges occurred in the first place because Israel lacked these reputations. In the period before the 1967 war, Israel's interests, to stop low-level harassment in 1957 and to restore its deterrent reputation in 1967, did not compete with the method by which they were supposed to be attained: *escalation.* In the new circumstances that were created as a result of the 1967 war, the reputations that Israel developed when its intrinsic interests were at stake were no longer relevant because escalation was no longer in Israel's interest. The reputation that would have been relevant, the ability to endure casualties and persist in a long war of attrition when the balance of interests does not favor Israel, did not exist and had to be created.

After the 1967 war, Israel's threats of escalation were credible but irrelevant because escalation served Egyptian rather than Israeli interests. As mentioned earlier, a major element in Egypt's strategy was to create the risk of superpower intervention, in order to pressure the United States to force Israeli withdrawal. Egypt could create this risk by a war of attrition and escalation. A successful Israeli escalation that endangered Egyptian territory proper, as well as the Egyptian regime, would most likely lead to Soviet intervention, which in turn would create great dan-

gers for world peace. An American intervention to counter Soviet intervention entailed the risk of things getting out of control in a global confrontation. Therefore, it was no longer in Israel's interest to escalate the conflict in spite of the fact that it had the capability and a reputational interest to do so.

Did Egypt Miscalculate Israel's Capacity for Endurance?

The relevant reputation that would have had an effect was a reputation for enduring the costs associated with a long and costly war of attrition, especially when the balance of interests favored Egypt, and Israel was fighting for extrinsic interests. Israel lacked such a reputation. In 1948 Israel did pay a heavy price in casualties, but in that war it fought for its survival as a state. The other wars were short, and Israel was able to achieve its goals with few casualties. In this war, Israel had to demonstrate its will to hold on to the territories in spite of the relatively heavy price it had to pay. At the same time, it became crucial for Israel to demonstrate that the costs would not be as high as Egypt had hoped, and that Egypt would end up paying an even higher price.

Stein argues that one of Egypt's miscalculations was to underestimate grossly Israel's capacity for endurance.[82] The evidence for this assertion according to Stein is Heykal's prediction that Israel's will to fight for the Sinai would weaken after Israel suffered 10,000 casualties.[83] Heykal argued that two factors gave Egypt an advantage in the contest with Israel. First, Egypt was favored by the balance of interests and nations which are favored by the balance of interests have a greater capacity to absorb casualties. In addition to being favored by the balance of interests, Egypt also had the advantage that it had more manpower than Israel and could sustain 50,000 casualties while it was doubtful if Israel could sustain 10,000 casualties. Heykal said, "But if we succeed in killing 10,000 of the enemy, he will be forced to ask for a cease-fire, because he is not capable of replacing lost manpower."[84] This is less a statement about Egypt's capability to inflict punishment and more a statement about Israel's capability to absorb punishment. While the Egyptians estimated that 10,000 casualties would change Israel's will to hold on to the canal, Israel's will was under major strain with only 700 casualties. Israel suffered 738 deaths during the whole period but only 375 of these were on the Egyptian front.[85]

Evidence that Israeli society was under strain during the War of Attrition because of the mounting casualties is abundant and did not go unnoticed in Egypt. If this war was more of a test about the relative capa-

bility of each side to endure a long and costly war of attrition then Israel signaled relatively early in the struggle that it had a difficulty fighting such wars when they do not involve vital interests or survival. As early as May 1969, two months after the beginning of the last phase of the War of Attrition, the Israeli press, reflecting the mood on the street, asked "When will it end?!" The Israeli public's dissatisfaction with the continued war and casualties began to show signs of doubt about the conduct of the war and about the leadership's interest in peace. Protest groups became active and high school graduates about to be conscripted into the army called upon the government to explore every avenue for peace. A play attacked the Israeli defense establishment only three years after its prestige in the Israeli society reached mythological proportions. These criticisms and doubts were noticed in Egypt. During a meeting with Western journalists Nasser said that a country which publishes the photographs of the previous day's casualties in the newspapers cannot win a long and costly war of attrition.[86]

Recreating Reputation-for-Capability in the War of Attrition

While Israel was at a disadvantage in convincing Egypt that Israel had the will to endure such a costly struggle, it was better prepared to demonstrate that Egypt's capability to inflict casualties was overestimated. Israel could win the war if it could demonstrate its capability to minimize the costs that it would have to absorb and maximize the costs to the Egyptian regime. Israel would attrit the attritors. To succeed in this task Israel had to demonstrate that the capabilities demonstrated in the Six Day War are not limited to situations of general mobile war. Even in a situation of local superiority, with limits on escalation, Israel would find a method to neutralize the Egyptian advantages and prevail by making the war costlier to Egypt.

In the air, the Israeli air force achieved a mythological reputation in the 1967 war. After the war Egypt developed a strategy that it hoped would neutralize the Israeli advantages. First, Egypt built underground shelters to protect its aircraft from surprise attack. Egypt also dispersed its aircraft to many airfields. Second, Egypt placed radar and SAM batteries throughout the country. Finally, Egypt sent 300 pilots to train in the Soviet Union. None of these measures, however, proved useful. Within six months of the start of the War of Attrition, Israel demonstrated that the superiority of its air force had prevailed against the new measures. By November 1969 all the SAM batteries were destroyed and by December their replacement suffered a similar fate. By December, the Egyptian air

force stopped flying altogether in acknowledgment of Israel's superior aptitude for aerial combat.[87] Finally, the strategic bombing phase which began in January 1970 forced Nasser to go to Moscow and threaten to resign and allow a pro American leader to redirect Egyptian policy if the Soviet Union did not intervene directly with military force to save his regime.[88]

Israel's specific reputation for capability, its air force's capability to deal with the new and specific circumstances that existed along the canal, enabled it to prevail in the War of Attrition. The major test of this war was who would be able to sustain the war. Using its air force, Israel was able to make the war more painful to Egypt, despite Egypt's greater capacity to absorb punishment. By the beginning of 1970 the war became intolerable to Egypt. Egyptian cities along the canal were deserted, Egypt suffered thousands of casualties and the Egyptian capital was at the mercy of Israeli pilots. This outcome combined with the relative inability of Egypt to inflict heavy costs on Israel forced Egypt ultimately to accept a ceasefire.[89]

While Israel's air force was decisive to the outcome of the war, Israel continued to demonstrate its superiority on the ground. Despite the fact that the new situation imposed limits on many of Israel's advantages in mobile warfare, Israel used in-depth raids to continue to demonstrate its superior capability as well as Egyptian vulnerabilities. By not confining herself to fighting along the canal, Israel forced Egypt to spread its military over a large area and alleviate the pressures along the canal. Thus, Israel took the initiative away from Egypt, forced it to abandon its plan, and, put Egypt on the defensive. Israel's in-depth raids demonstrated that Israel could act deep inside Egypt with imagination, daring, and superb executio;, and could still inflict substantial pain dismissing any doubts Egypt might have had that given the new circumstance Israeli advantages could be neutralized.[90]

The Competition of General Reputations with Other Interests

Finally, the War of Attrition provides two more examples in which general reputation consideration loses out to other more important interests. During the war, Chief of Operations Weizman recommended that Israel take the offensive and escalate by engaging the Egyptians on the western side of the canal. His reasoning was similar to Dayan's during the period before the 1956 war. A propensity to escalate might convince the Egyptians more conclusively that Israel valued its reputation and would do whatever it takes to bring the war to an end. Yet, escalation risked super-

power intervention and Israel's interest at the time was to deescalate the conflict and pacify the situation so as to avoid pressure from the United States to make concessions. The latter consideration prevailed.

The second instance was when the Egyptians violated the cease-fire accords and moved their missile system to the canal. Israel acquiesced to the challenge and did not try to destroy the missile system. Israel did not want to undermine the fragile cease-fire that was arranged by the United States, which was one of its primary interests. It was also concerned with Soviet reaction.[91]

In conclusion, critics of deterrence's argument that reputations are context dependent is supported in this case. New situations give rise to new uncertainties. Specific reputations developed in other situations are irrelevant to the new circumstances. Israel had to demonstrate that it had the will to endure a relatively costly war of attrition until Egypt would agree to negotiate a peace treaty. And Israel had to demonstrate that the capability it displayed in a general war would be applicable to the new circumstance that existed along the canal and would not be neutralized by technological innovations such as radar and SAMs.

The findings that reputations are context dependent show that the Jervis paradox and Nalebuff's rebuttal do not address the essence of the reputation problem[92]. Jervis argues that the behavior of the United States in the Mayaguez incident would not have restored its general reputation for toughness after Vietnam, because this kind of behavior was expected even from a weak state concerned with its reputation for toughness and, therefore, was of little inferential value. The reason the tough response in the Mayaguez incident was uninformative about the United States' will to bear costs in a Vietnam like situation is that the two cases are not similar. The Mayaguez incident created the impression that the United States would be willing to take similar risks in situations in which its vessels are captured but would not support the impression that the United States' leadership was resolved to fight as long as necessary to win in situations similar to Vietnam. North Korea would not expect a resolute American response if the North made a move against South Korea because of the American behavior in the Mayaguez incident. Nalebuff's rebuttal that a country that failed to act would suffer a massive loss in reputation also misses the main issue.[93] Vietnams and Mayaguezes do not add up to create one continuous variable. They create different specific reputations which apply only to situations that are similarly structured.

Crisis Bargaining Behavior

Competing Hypotheses

The analysis of deterrence focuses on the crisis-bargaining-behavior of the defender and attempts to discern whether the sending of credible signals leads to deterrence stability. A common assertion is that the crisis-bargaining-behavior of the defender influences deterrence outcomes. Credible threats deter, and they cause a challenger to revise upward his belief about the defender's willingness to use force. Issuing repeated threats, adopting an uncompromising bargaining position, and undertaking extensive military preparations within a general policy of tit-for-tat are suggested by Huth.[94] The strategy must be firm, but flexible, so openings for compromise and accommodation would not be missed. Fearon suggests that defenders' signals are credible only if they are costly. Acts which involve the risk of loss of face, as well as the risk of a spiral and an unwanted war, demonstrate resolve.[95]

Critics of deterrence argue that the proper management of crises requires not only acts of toughness to demonstrate resolve but also acts of reassurance.[96] Actions taken to demonstrate resolve may not leave the challenger room to find face-saving solutions or to back down and diffuse the crisis. At the same time, critics of deterrence argue that signals are misperceived. Leaders in challenging states are preoccupied by their internal or external problems and tend not to pay attention to the signals sent by the defender.

Why Were Costly Signals Uninformative?

Our discussion of the crisis-bargaining-behavior of the parties can be brief because most of the relevant aspects of behavior were discussed in the analysis of each party's interests and strategy. The War of Attrition did not begin with a crisis stage in which signals were exchanged; rather, hostilities were the first act undertaken by the challenger. An examination of the actors' interaction prior to the breaking of hostilities to ascertain whether the signals exchanged were credible is thus unnecessary.

What we need to examine is whether, once the hostilities began, the defender sent credible signals that would have reestablished deterrence stability. The question is whether costly signals, signals that convey the risk of a spiral and unwanted war, were sent and were they effective.

Israel did use retaliation and escalation. She responded to artillery barrages by attacking military and later civilian targets first along the

canal and later deep in Egypt. When that failed Israel retaliated with ground forces west of the canal. Ultimately, Israel introduced its air power which escalated its punishing raids from areas along the canal all the way to strategic bombing all over Egypt.

Despite the escalatory steps taken by Israel, the risk of a spiral and unwanted larger war, during the War of Attrition, was not created. Both Egypt and Israel knew that it was not in Israel's interests to create a situation of uncontrolled escalation. As we mentioned in our discussion of the balance of interests, that would bring about Soviet intervention and the possibility of American pressure on Israel. For the same reason, mobilization and greater troop movements would not have been effective or credible. Any large scale warfare on the west bank of the canal would have brought Soviet intervention to save the Egyptian regime. Even if a Soviet intervention was not immediate, Israel could achieve little by crossing over the canal because it risked being drowned by a "sea of Arabs." Therefore, Israel, for reasons of superpower dynamics, geography and relative power could not introduce, credibly, the risk of a spiral and the possibility of a general war. The only way to reestablish deterrence was by making the war intolerable to Egypt within the limits of controlled escalation. This was achieved with strategic bombing.

It is important to note that the limits on Israeli escalation existed as long as Soviet intervention did not occur. Had Israel escalated the war and brought about Soviet intervention then the United States would be in a position of having to support an escalatory move by Israel and risk Soviet reaction in the defense of Egypt. To prevent this eventuality the United States pressured Israel not to escalate the fighting.

The situation changed after the Soviet Union began its massive intervention to stop the Israeli strategic bombing. Once Soviet intervention did occur, it limited Israel's ability to retaliate and protect its own forces. In the case that fighting continued under a Soviet umbrella, or in case Egypt renewed the fighting after the cease-fire agreement in August 1970, Israel would have had to provoke a larger war and destroy the Soviet air defenses. Such a move would have forced the United States to support Israel from a Soviet threat to retaliate in order to preserve its own reputation. Under these circumstances Israel's threat to cause an unwanted war was credible and did deter the Egyptians from renewing the fighting as we shall soon see.

As Khalidi points out, the War of Attrition was a psychological war of nerve and endurance.[97] The only credible signal in such wars is the ability to endure the costs associated with such a war while demonstrating that the costs would be higher on the other side. "Attriting the attri-

tors" while minimizing one's casualties was the only viable strategy and it was adopted by Israel.

The Failure of Reassurance to Produce Deterrence Stability

The argument made by critics of deterrence that an important element in creating deterrence stability is the offer of reassurance and concessions does not fare well in this case. Immediately after the Six Day War Israel offered Egypt the Sinai in return for a peace treaty arrived at through direct negotiations. Syria was also offered a similar deal. The only caveat was the demilitarization of these territories. This Israeli offer, made through the good offices of the United States, was good through October 1968. According to Eban, Israel's Foreign Minister at the time,

> between 1967 and 1973 the Arabs could have recovered all of Sinai, and the Golan, and most of the West Bank and Gaza without war by negotiating boundaries and security arrangements with Israel. The policy of the Israeli government at the time contained no ideological barriers to a territorial agreement, and a parliamentary majority could have been obtained.[98]

This is supported by Arab sources. Heykal said that Dean Rusk, U.S. Secretary of State in the Johnson administration suggested to the Egyptian Foreign Minister, Mahmud Riad, that Israel was ready to withdraw from the Sinai in return for an agreement with Egypt. Nasser also told Soviet leaders in July 1970 that he could have received the Sinai if he were ready to abandon Jerusalem and other parts of the West Bank.[99] Nasser, for reasons discussed above in the section on the balance of interests, perceived a peace treaty as surrender and could not accept Israel's peace offers.

Israel's conciliatory offers stand in sharp contrast to Egypt's unwillingness to make any concessions which would have improved its bargaining position. Egypt could have made some meaningful concessions to Israel and brought about a change in the U.S. attitude towards the conflict. But Egypt refused to accept anything less than a conditional cease-fire that would bring a complete Israel withdrawal without a peace treaty. More interestingly, Egypt could have made some meaningful concessions to the United States by changing its global orientation and creating incentives for the United States to realign herself and take a more even-handed position in the Middle East. Instead Nasser wanted to force the hand of the United States by creating the risks of a global confrontations with-

out offering any incentives. The United States, in turn, saw no reason to save a Soviet client from the difficult position into which he had cornered himself, at a time when his actions led to further Soviet advances in the Middle East and Nasser showed no inclination to switch sides. In the absence of any meaningful concessions to Israel or the United States, Nasser could not extricate himself from a weak bargaining position. He could only threaten American interests credibly if the Soviets were deeply involved. With his dependency on the Soviets he could not offer any concessions to the United States. Therefore, the United States had no incentives to find a solution that would be beneficial to Egypt.

The American administration understood that Egypt was hurting and needed a cease-fire and also knew that the Soviet Union was as eager as the United States to avoid the risks of a global confrontation. Thus, the United States' offer, a cease-fire without the linkage to an Israeli withdrawal had to be accepted by Egypt. A more conciliatory Egyptian position would have created the incentives for the United States to assume the costs associated with the exertion of greater pressure on Israel to withdraw.[100]

In conclusion, Israel could not influence Egypt to accept a cease-fire by sending credible signals that introduced the risks of a spiral and unwanted war because this strategy played into Egyptian hands. Israel's success was dependent on the promise of credible denial. This points to the importance of analyzing how the different variables interact and affect each other. In the 1954-56 and 1967 cases we saw that credible signals were disregarded because the challenger believed that he was favored by the balance of capability. In this case we see that costly signals are influenced by the balance of interests. This explains why the proper management of crises is not sufficient to ensure deterrence success. If all that was necessary to prevent wars was the proper mix of resolve and reassurance, this would have been learned by now by most leaders and, fewer wars would have occurred.

Leng argues that challengers learn from past defeats that their crisis-bargaining-behavior did not display enough resolve. They conclude that they should adopt a tougher stand in the next crisis.[101] This is why the likelihood of war increases in the second and third "round". Egypt's crisis bargaining behavior, however, was not motivated by this consideration. Egypt displayed resolve in the 1954-56 period because it believed that Israel lacked the capability and resolve to go over the brink, and it challenged in 1967 because it thought that the balance of capability favored Egypt. In the War of Attrition Egypt's resolve was a function of its valuation of the balance of interest and capability as well as its proper

understanding Israel's interest in de-escalation. Therefore, Egypt's resolute behavior in the later crises was not caused by its belief that its crisis bargaining behavior in the previous crises was too timid, but was caused by uncertainties about Israel's capability or resolve. As a result, Israel's crisis bargaining behavior which contained the proper mix of resolve and reassurance failed.

Finally, the absence of reassurance and conciliation was not a cause for the failure of deterrence as critics of deterrence suggest. The finding that emerges from this study is that the proper time to use reassurance effectively in an enduring rivalry is not during each crisis as critics of deterrence suggest but after deterrence stability is created and the challenger is willing to consider conflict resolution through bargaining and negotiations.

Conclusion: "Designing Around," Success or Failure?

The War of Attrition is used by Stein to illustrate the fragility of deterrence because, in a sense only a few months after Israel's stunning victory in 1967, Egypt began to shell Israeli positions on the Suez Canal. Then, in 1969 Egypt began a costly war of attrition which lasted until August 1970. Egypt challenged deterrence in spite of the fact that the intelligence services of the United States, the Soviet Union, Egypt, and Israel all agreed that Israel was militarily superior. Deterrence failed even though the "stage was set for the success of conventional deterrence."[102] Leaders, according to Stein, "design around" deterrence as George and Smoke suggest.

This ignores a more appropriate view that, first, "designing around" is an indication of deterrence success rather than deterrence failure. Second, throughout the three years between 1967 and 1970 Egypt's challenges were related to opportunities and that need was not sufficient to cause deterrence failure. Finally, despite the fact that the nature and intensity of the need to challenge Israel did not change, Egypt agreed to a cease-fire and was deterred from challenging Israel until 1973.

As a result of the 1967 defeat we detect a major change in Egypt's goal, and the strategy it used to attain this goal. Regaining the Sinai, rather than challenging Israel's intrinsic interests for the purpose of building a leadership position in the Arab world, became the main goal. Attaining it in a general war was no longer perceived as a viable strategy.[103]

After 1967 the contemplation of the use of force to attain limited

goals became a part of a larger strategy that placed greater emphasis on politics. The new conception that guided Arab policy makers was the employment of limited war both as an attrition strategy and as an instrument to put pressure on Israel and the superpowers. The War of Attrition was fought to regain the Sinai and was limited in nature. Thus, the success of deterrence can be detected in the fact that the challenger realized that the range of options available to him had narrowed.

Even this more limited kind of challenge did not occur throughout the whole period. As we showed above, capability related changes determined the timing of the challenge. After the initial fire exchanges in September 1967 when Israel signaled to the Egyptians that their cities were vulnerable, Egypt ceased fire and began to evacuate the cities. When in response to the sinking of the Israeli ship Eilat, Israel hit Egypt's oil installations and refineries, Egypt ceased fire for a year during which it continued to evacuate the cities and completed its defensive positions. When in response to the renewed fire in September 1968 Israel began its in-depth raids, Egypt stopped fighting for four months to complete its defenses. Only then, and after 300 newly trained pilots returned from the Soviet Union, did Egypt begin the last phase of the War of Attrition. When Israel escalated in the air and demonstrated that the Israeli air force could deal with the radar, the SAMs, and the newly trained pilots, Egypt accepted a cease-fire.

It is important to note that the conditions under which Egypt accepted the cease-fire were not the conditions it demanded during the War of Attrition. Nasser insisted throughout the War of Attrition that the war was necessary in order to force Israel to accede to withdrawal, and that a precondition for a cease-fire was an agreement in which Israel would begin to withdraw its troops. Nasser would not accept any cease-fire without the explicit connection between a cease-fire and an Israeli withdrawal. At the end of the war he accepted a cease-fire without such an explicit connection. To convince Israel to accept the cease-fire, Nixon committed the United States to a position in which no Israeli soldier would be forced to withdraw from the occupied territories unless a peace agreement accepted by Israel was reached.

This strategy of attrition, used to compel Israel to return the Sinai without significant Egyptian concessions, ended in failure. Israel demonstrated its will to hold on to the Sinai and absorb costs in the absence of a peace treaty with Egypt. Israel also demonstrated that instead of being attrited by Egypt, Egypt would end up the attrited party. Only direct Soviet military intervention saved Egypt from another humiliating defeat. After the War of Attrition, the strategy of attrition was no longer viewed

by Egyptian decision makers as a viable strategy because Israel had demonstrated its willingness to pay a high price in men and material during the 1969-1970 War of Attrition and Egypt feared that Israel would escalate the conflict.[104] "Designing around" led to a narrowing of the options available to challenge Israel. Egypt realized that the War of Attrition had run its course.

In addition, as a result of the War of Attrition, deterrence held for three years. Sadat seriously contemplated attacking Israel in 1971, 1972, and early in 1973. In 1972 he had to dismiss his senior commanders for opposing his directive to prepare Egypt's forces for attack.[105]

Because of the changes caused by Nasser's death on September 28, 1970 and Sadat's assumption of power, it is important to investigate whether the fact that Egypt was deterred was related to the change of leadership or to Israel's credible threat. As evidence that the latter is the case, it is unlikely that Nasser, had he been alive, would have renewed the fighting when the term of the cease-fire agreement expired; and, second, that it was not Sadat who was mainly deterred by Israel but the Egyptian military command.

While it is difficult to speculate whether Nasser would have renewed the fighting on November 7, 1970, there are suggestions that he would not have done so. First, Nasser simply was not involved in operational planning to begin another war. Two months before the cease-fire's expiration date, Nasser was to have met with his minister of war, Fawzi, to approve the military plans for the liberation of the Sinai. Fawzi reports he took maps and plans (including Syrian plans approved and signed by the Syrian defense minister) to Nasser's vacation place. The meeting never took place because the Libyan leader, Kadafi, arrived on a surprise visit and Nasser did not find the time, during four days of meetings, to evaluate Fawzi's plans. Immediately after the planned meeting with Fawzi, Nasser became involved in the "Black September" events in Jordan which lasted until his death. Had Nasser planned to renew the fighting it is reasonable to assume he would have found the time to go over the war plans with his war minister.

It is also important to examine what military options were available to Nasser. A repeat of the War of Attrition would not have attained any further political or military gains and it is doubtful that Israel would have acquiesced to such a war under the constraints imposed by the Soviet intervention. The more likely scenario would have been an Israeli strike at the Soviet air defenses in Egypt with all the risks that it entailed. The Egyptians believed that Israel would retaliate with a general war should the fighting be renewed.

The other options available to Egypt would have been a more general Egyptian attack in the Sinai or a joint Egyptian-Soviet attack. Neither was a viable option. We ought to recall the critical military situation in which Egypt found itself in January 1970 when Nasser went to Moscow and threatened to resign in favor of a pro-American leader in the event that the Soviet Union did not help Egypt. The military situation in Egypt improved only because of massive Soviet involvement. Thus, the Egyptian army was not in a position to renew the fighting in November 1970. An Egyptian-Soviet military attack was not a realistic option given the reluctance of the Soviet Union to intervene on behalf of Egypt even when it was for defensive purposes only. It was unlikely that the Soviets would agree to an offensive campaign that would most likely risked an American intervention in response. The Soviet Union refused to even consider placing TU-16-C bombers, that Nasser requested, on Egyptian soil for fear of "international complications." Thus, it seems that unless important changes took place in the balance of capabilities or on the international scene the renewal of the fighting by Nasser was not likely.

The change of leadership in Egypt did not bring to power a leader that was less determined to renew the fighting. As I mentioned above Sadat seriously considered renewing the fighting in 1971, 1972 and 1973 but was dissuaded by his military commanders from a challenge. The Egyptian commanders argued that Egypt lacked offensive capability in the air and sufficient equipment necessary for canal crossing. In 1972, the commander of the Third Army, the commander-in-chief, and the vice minister of war all opposed even a limited military action. They were all dismissed. Even when the Egyptian general staff was planning only a limited canal crossing that would not exceed the range of the anti-aircraft system, the Egyptian high command was still deterred from challenging the Israeli defense positions. We see then that the decision not to challenge was not caused by the change in leadership but was due to the credibility of Israel's threat.

This leads us to the final piece of evidence that, despite the strong pressures to act, the final decision to challenge deterrence in 1973 was made only after Egypt felt confident that it had the capability to mount a successful limited attack. This occurred after the January 1973 Soviet decision to deliver the offensive arms that were necessary to launch the October war. By August, Egypt received SCUD missiles and anti-tank and anti-aircraft missiles which convinced the Egyptian high command that they had the capability to execute their limited strategy successfully.[106] Why Egypt attacked in 1973 and how deterrence theory explains this case will be discussed in the next section.

2
"DESIGNING AROUND" II: THE YOM KIPPUR WAR, SUCCESS OR FAILURE?

The 1973 Yom Kippur War is another good example of the failure of deterrence theory according to Lebow and Stein. First, Egypt did not make any estimation of the balance of interests. Egyptian leaders were only concerned with their own interests and disregarded Israeli interests. Then, Egyptian leaders talked less about specific interests at stake, interests such as the Sinai, and emphasized instead their strategic interests, interests such as reputation. Still more puzzling, according to Stein, is the observation that the absence of an analysis of the balance of interests did not lead the Egyptian leadership to miscalculate the Israeli response. Egyptian leaders did not expect Israel to back down but to fight and this belief played an important role in their decision to preempt.[107]

When an analysis of the balance of capability is taken into account, Egyptian behavior is even less consistent with the predictions of deterrence theory according to Lebow and Stein. First, according to Stein, the estimation of "inferior military capability was only a temporary deterrent to the use of force."[108] Challengers, according to Stein, "design around" the defender's superiority. The ingenuity of the military mind insures that it is only a matter of time until a strategy that offsets the superiority of the defender is developed. Second, challengers may go to war even if the balance does not favor them if they perceive that the future trend is such that the balance will be worse from their perspective in the future. Thus, not only relative capabilities matter but the negative trend plays an important role in decisions to challenge.[109]

Finally, Stein argues that the decision to challenge deterrence is influenced by the challenger's perception of the prospects of diplomatic progress. When hopes for a diplomatic settlement fade, challengers resort to the use of force. Insuring deterrence stability requires, according to Lebow and Stein , the use of reassurance strategies as well as demonstra-

tions of resolve. In the absence of the first, the latter are not likely to work and might even lead to war, the outcome deterrence policies intended to prevent in the first place.[110]

The historical evidence does not support most of Lebow's and Stein's criticisms and the longer term perspective on deterrence adopted in this study sheds a different light on the Yom Kippur War. First, the reason the Egyptian leadership did not engage in an analysis of the balance of interests was the learning that took place as a result of the War of Attrition. The uncertainty the Egyptian leadership had about Israel's will to fight for less than intrinsic interests was removed and, as a result of Israel's behavior during the war, Egyptian decision-makers anticipated correctly a forceful Israeli response.

Second, Stein misses the proper causal chain in the Egyptian decision to challenge. The Egyptian leadership did not decide to go to war when they realized that Egyptian capabilities had reached their peak and that the trend in the future was only going to worsen. Rather, the realization that the trend in the balance was negative from Egypt's perspective, reached in mid-1972 if not earlier, forced the Egyptian leadership to search for a strategy that would offset the Israeli superiority. Thus, the negative assessment of the military trend leads to a search for an alternative strategy and not to a decision to challenge deterrence. When the limited-aims strategy was found, the decision to challenge was made because the balance, as well as the trend in the balance, was no longer relevant to the outcome of the war.

Furthermore, the process which led the Egyptian leadership to the limited-aims strategy suggests that, first, contrary to Stein's interpretation, the discovery of strategies which enable challengers to design around the defender's superiority requires imaginative conceptual leaps in thinking about a problem and are not an event that is bound to occur with the passage of time. Second, successful applications of deterrence policies throughout an enduring rivalry make the process of finding a good strategy even more difficult. Finally, the choice of strategy: limited aims—given the limited goals Egypt pursued after the Six Day War, is indicative of success and not failure.

The next chapter evaluates the predictions made by deterrence theorists as well as critics of deterrence through the framework used in the previous chapters. It considers the reasons for the Egyptian challenge in 1973 and the strategies Egypt considered and finally adopted.

Egypt's Goals and Strategy

Before we discuss Stein's critique let us turn to a brief analysis of Egypt's goals and strategy after the War of Attrition. Nasser's strategy was to use attrition warfare to force Israel to make concessions and to create the risk of superpower involvement and global war in order to pressure the United States to demand Israeli concessions. His strategy failed when Egypt suffered from the war more than Israel and when Soviet involvement was necessary to save his regime from another humiliating defeat.[111] The Soviets, despite their involvement and probably because of it, had an interest in de-escalation and placed limits on Nasser's ability to escalate the conflict. Thus, instead of increasing the risks of superpower confrontations, Nasser created a situation in which the superpowers had strong incentives to control escalation. Instead of putting pressure on Israel to make concessions, the United States moved closer to Israel's position. Despite the fact that in the Rogers' initiative the American position was closer to the Egyptian position, Nasser's unwillingness to make any significant concessions to Israel or the United States closed the door for any possible gains through diplomacy. Thus, Nasser's strategy led to a dead end.[112]

Sadat came to power at a time when it became apparent that a new strategy was necessary if Egypt were to regain the Sinai. While the basic elements of Sadat's strategy remained the same as Nasser's, Sadat's approach was quite different. Sadat's main goals were the return of all the Arab territories and the resolution of the Palestinian issue. In case these goals could not be achieved through diplomacy, Sadat kept the war option open in order to have leverage on the West. Sadat's method to achieve his goals, however, was different from Nasser's. While Nasser ruled out a peace agreement with Israel and declared that what was taken by force would have to be returned only by force, Sadat declared his willingness to negotiate a peace treaty with Israel based on a comprehensive agreement according to the Arab interpretation of UN resolution 242. Sadat, then, did not rule out the possibility that a peace agreement could be reached through diplomacy.[113]

Sadat's first step was to assess the prospect that diplomacy could succeed. He was aware of the fact that a replay of the 1957 scenario would not occur but he hoped that the West might structure a process in which Egypt's position would be given greater weight. To give the Europeans an incentive to pressure Israel directly, or through the United States, Sadat sent the Egyptian Foreign Minister, Riad, to western European capitals to promise that Egypt would be ready to open the canal after an Israeli with-

drawal.[114] To induce the United States to clarify its position and take a more direct role in pressuring Israel to make concessions, Sadat held the promise of Egyptian realignment between the superpowers.

The main difference in Sadat's strategy, however, was his willingness to discuss the possibility of a peace agreement with Israel. In his February 4, 1971 initiative, Sadat picked up on Dayan's suggestion of an interim agreement and offered to open the canal in return for an Israeli withdrawal. On February 15 Sadat offered to sign a peace treaty with Israel in return for a complete Israeli withdrawal. Whether Sadat was sincere in his peace offers or whether he used them as a ploy to create a rift between Israel and its Western allies is open to debate.[115] In his memoirs Sadat said that his actions took Israel by surprise because Israel's long-held position was that no Arab leader was willing to consider peace with Israel. This in turn strengthened Israel's standing in the West. Now for the first time the Arabs were able to force the Western powers to reconsider their positions.[116] But while Sadat did introduce interesting changes in Egypt's position, these changes were not perceived as sufficient by Israel or the United States government. After a year of negotiations the gap between the parties remained wide.

Both Israel and the United States demanded more significant concessions from Egypt. Israel could not accede to a complete withdrawal from the Sinai without a demilitarization of the area. Israel could not accept a peace treaty that did not include reconciliation, and was dependent on the resolution of the more complicated issues, issues such as those between Israel and the Palestinians. The United States' position was that Egypt would have to move from the Soviet to the American camp and it would have to be more forthcoming in its bargaining with Israel as well.

Sadat realized that American position had moved closer to the Israeli position and that direct pressure on Israel and the United States would be required if the latter were to pressure Israel to make concessions.[117] Renewed fighting, Sadat reasoned, would force the Israelis to reassess the relative balance, which in turn would make them more conciliatory at the bargaining table, and it would endanger the new era of cooperation between the United States and the Soviet Union by introducing the risk that the superpowers would lose control of events. This, in turn, would force the United States to reconsider the Arab position.

Thus, Sadat chose to turn to the military option.[118] This option, however, was not viable during 1971 and 1972. The Egyptian political elite did not perceive that Egypt had a viable military option.[119] Sadat read the results of the War of Attrition correctly, it was a costly failure from Egypt's perspective, and realized that only an all out offensive against

Israel was likely to enable him to attain his political goals. He also realized, however, that a military campaign required, either a direct Soviet involvement on the Arab side, or Soviet military aid to neutralize Israel's capability to strike at Egypt's population centers.[120]

On his various trips to the Soviet Union, Sadat concluded that his all-out-war strategy would not be a Soviet-Arab war but an Arab war supported by Soviet weapons because the Soviet Union did not want to risk a war with the United States.[121] In the absence of direct Soviet participation in the fighting, Egypt needed surface-to-surface missiles or aircraft with a range and payload capable of threatening Israel's population centers. Only with such a capability could Egypt create a balance of terror on the strategic level which would enable it to pursue a land offensive. Sadat also sought Soviet nuclear arms or a Soviet nuclear guarantee against Israel.

The Soviets, however, were concerned that their improved relations with the United States would be jeopardized by an Egyptian-Israeli war and refused to give Egypt the weapons necessary for an offensive campaign.[122] In addition to international considerations the Soviet decision might have also been influenced by the realization that Sadat had moved away from Nasser's domestic heritage and flirted with the United States. Therefore, the Soviet Union had little interest in strengthening Sadat's power at the expense of the pro-Soviet groupings headed by Vice President Ali Sabri. Sadat's expulsion of Soviet advisers, after being refused surface-to-surface missiles and MiG-23s during his visits to Moscow between October 1971 and April 1972, forced the Soviet Union to reconsider its policy regarding military aid to Egypt.[123] The Soviets risked losing an important ally in the Middle East and damaging their reputation in the Third World. Renewed aid may have suited their policy *vis-a-vis* the United States, because their expulsion from Egypt reduced the risks of their direct intervention in the conflict as well as the risk of a superpower confrontation. The Soviets would be able now to support the Arabs without being accused of direct interference with an American ally. Detente would be saved.

The stage was set for an Egyptian offensive but the question remained as to what military strategy had the greater chances of success given Israel's superiority. Sadat's military leaders were skeptical of Egypt's ability to attack Israel in an all-out war. Sadat's innovation was in the adoption of a limited-aims strategy.[124] This military option would be part of a military-political strategy in which the military spark would unfreeze the political situation, and would be followed by a diplomatic initiative in which Egypt, after receiving the necessary arms for the military offensive

from the Soviet Union, would realign itself with the United States. Thus, Sadat was able to avoid Nasser's mistake and offered the United States a significant concession in order to place it in a position in which it would have to put pressure on Israel. Competing with Israel for alliance with the United States held the promise of renewed independence, regained status, and a leadership position in regional politics. The conceptual breakthrough, however, was the adoption of a limited-aims strategy for political gains.

Stein's Critique

In discussing the balance of interests in the period before the 1973 war, Stein is surprised by two aspects of Egyptian decision-making. First, the Egyptian leadership did not make calculations of relative interests. This is surprising because an assessment of relative interests is a good indicator of relative resolve and the likelihood that the defender will retaliate and fight in response to a challenge. The absence of an assessment of the balance of interests might explain Lebow's finding that challengers frequently resort to force anticipating that the defender will acquiesce rather than retaliate. But in this case, Stein finds that the Egyptian leadership was certain of Israel's response. Stein argues that Egypt correctly read the Israeli threat but this interpretation was not based on the analysis of the balance of interests.[125] What is puzzling is the origins of Egypt's prior beliefs that Israel would fight in the absence of an analysis of the balance of interests.

The second aspect of Egypt's behavior that puzzles Stein is that the Egyptian decision-makers discussed their interests at stake not in concrete terms such as territory or political rights, but in symbolic terms. Egypt emphasized the effects of the situation on their strategic interests, their reputation and humiliation, rather than their Sinai. President Sadat, according to Stein, defined the issue as "to be or not to be," Heykal argued that this conflict was the "crisis of our life," and General el-Shazli argued that military action was important to "symbolize our refusal to remain defeated."[126] Why did Egypt emphasize strategic rather than specific interests at stake? Is the absence of an analysis of the balance of interests as surprising as Stein suggests?

The discussion of the balance of interests in the last chapter on the War of Attrition reveals that the impact of the 1967 defeat served to reinforce the root causes of Arab animosity towards Israel on two levels. The first was the concrete level which included tangible strategic assets such as the loss of control over the Sinai, the Gulf of Aqaba, the sources of the

Jordan River, and the Suez Canal. Egypt and the other confrontation states lost parts of their sovereign territories. On the second level, the military defeat symbolized the defeat of a philosophy of life and whole course of action which was supposed to lead to national renewal, regeneration and dignity. Egypt, which symbolized the forces of progress and renewal lost to Israel which symbolized the forces of oppression, colonialism, and the West. While the Arab states had a long experience of defeat at the hands of the West, the loss in 1967 was different in that it demonstrated the failure of the progressive regimes to lead to different outcomes. It served as a painful reminder that the problem may be the result of more fundamental causes inherent in the weakness of Arab society.[127]

The reason the Egyptian leadership described their own interests in existential terms (and this is where the two levels are connected) is that the tangible losses, important as they were in concrete terms, indicated Egyptian weakness, and cast doubt about Egypt's ability to lead the Arab world as well as the Third World. The concrete territorial losses had an importance that went beyond their tangible value; they were painful reminders of Egyptian weakness and limited its ability to play a leading regional role. The conflict with Israel, which was supposed to enhance the power and influence of Egypt in the Arab world became a burden which weakened Egypt. Egypt became dependent on aid from other Arab states, particularly Saudi Arabia, for the continuation of the conflict. Thus, Egypt's power and influence *vis-a-vis* other regional contenders for power declined.[128]

This analysis explains why Egyptian leaders talked less of specific interests at stake, like the Sinai, and more in terms of humiliation which led to a loss of reputation and an existential crisis. The loss of the Sinai symbolized Egypt's weakness which translated into loss of power and influence in the Arab World. Regaining the Sinai was important for its own sake and, more importantly, for the purpose of regaining power and influence in the Middle East.

The Egyptian leadership thus sought the recovery of the Sinai. Israel's interest was to keep the Sinai until the Egyptian government recognized Israel's right to exist. Israel wanted to negotiate directly with Egypt on the nature of the peace treaty. Israel's claim to the Sinai was only strategic.[129] Israel also sought to reduce Egypt's incentives to challenge deterrence and was willing to offer Egypt a partial withdrawal from the canal in return for an Egyptian agreement to reopen the canal and resettle the cities along it. Israel also had an interest in initiating the diplomatic process with its own proposals in order to prevent an American ini-

tiative that might have been less favorable from Israel's perspective. We see, then, that the balance of interests was the same in the period before the Yom Kippur War as it was during the War of Attrition. The question was and remained what were the best strategies to achieve this goal?

The second issue raised by Stein was that the Egyptians knew that Israel would fight if challenged. Contrary to Stein's argument, however, Egypt's conclusion that Israel would fight was not reached independent of an analysis of the balance of interests.[130] The balance of interests was analyzed before the War of Attrition and remained the same throughout the period. Egypt's belief that Israel would fight was reached as a result of the lessons learned during the War of Attrition. Before the War of Attrition, Egypt was not certain that Israel would be willing to fight a long and costly war for what Israel considered bargaining chips. As a result of the War of Attrition, however, Egyptian leaders believed not only that, in the absence of a peace treaty, Israel had the capability and will to fight for the Sinai, but also that, if Egypt renewed attrition warfare, Israel would respond with a more general war. Thus, the inattention to the balance of interests is not as striking as Stein suggests. The uncertainty about Israel's will to hold onto the Sinai in the absence of a peace treaty was resolved in the War of Attrition. Egypt no longer needed to evaluate the interests at stake in order to ascertain the nature of an Israeli response to an Egyptian challenge.

The Balance of Capability

The analysis of the balance of capabilities before the 1973 war leads to this puzzling observation: the quantitative balance clearly favored the Arab states, yet every military analyst argued that the Arab states would not go to war if they faced certain defeat, as indeed they did given Israeli military superiority.[131]

If in the Six Day War the Arab states had a military advantage of 1.47:1 in the air, 1.71:1 in tanks and 1.09:1 in manpower, before the 1973 war the ratios improved from the Arab perspective to 2.54:1 in the air, 2.8:1 in tanks and 2.16:1 in manpower. Yet, despite the widening gap in the military balance in terms of force ratios, all the actors in the area, as well as the superpowers involved, doubted Egypt's and Syria's ability to wage a successful war with Israel. Statesmen and analysts alike referred to Egypt as the militarily weaker party.[132]

This situation was clearly recognized in Egypt where the military and political elite did not believe that Egypt had a military option and opted for a compromise based on a negotiated settlement. In October 1972

Sadat even had to dismiss many of his military high command for refusing to carry out his orders to prepare Egypt's military for an offensive. The Egyptian military high command did not believe that the army was ready for war.[133] Did Egypt and Syria go to war knowing they would lose? Did Egypt embark on a suicidal course of action because the value of a lost war was preferable to the status quo? How do the postulates of deterrence theory fare in this case?

The analysis of the military balance poses two challenges to deterrence theory according to Stein. First, contrary to the balance of capability hypothesis, which argues that if the defender is favored by the short-term military balance, deterrence will hold; the military inferiority of Egypt was not a deterrent to the use of force. The Egyptian military planners who were deterred by Israeli military superiority were replaced by other military planners who designed around Israel's superiority. Stein concludes from this that military superiority is not a deterrent to the use of force, but only "an obstacle to be overcome."[134]

In addition, Stein argues that more important than the military balance in determining deterrence outcomes is the trend in relative capability. The accepted premise of deterrence theorists is that a favorable balance of capability insures stability. Challengers who are in an inferior position will attempt to close the gap and attain superiority before they challenge. Stein argues that expecting deterrence stability in such situations may be imprudent. If highly motivated challengers reach a point where they believe that their capability has reached a peak and may no longer improve, and that in the long run the balance might even worsen from their perspective, they might challenge deterrence even if the present balance is unfavorable.[135]

Stein argues that "not only assessments of the general balance but also estimates of changing trends in the balance may shape a decision on whether or not to resort to force."[136] She argues that the Egyptian decision to challenge in 1973 is similar to the Japanese decision to strike at Pearl Harbor in 1941. Sadat estimated that Egypt had reached the peak of its capacity and that the future trend in the balance was unlikely to improve. Sadat concluded that Egypt would be unable to improve its relative capability to achieve parity or superiority over Israel. Thus, Sadat and his advisers believed that this would be Egypt's best chance for several years. The evaluation of the military trends according to Stein, was more important than the negative assessment of the military balance in the debate about the use of force in 1973. She argues that the Egyptian generals opposed the use of force when they saw the growing gap in relative capability in the autumn of 1972, but when Sadat assessed that Egypt

reached the peak of its capability he urged his generals to attack. According to Stein, "a negative assessment of future rather than present capabilities was an essential component in Egyptian calculations. Here Egypt behaved very much as did Japan in 1941."[137]

Stein's conclusion is that neither military inferiority, nor the absence of a blitzkrieg strategy, was a deterrent to a military challenge. More importantly, the prospect of a worsening balance for the militarily weaker party was a catalyst to a military challenge rather than a deterrent. Finally, leaders design military strategies which compensated for their military weakness.[138]

Before turning to an evaluation of Stein's analysis, a brief description of the evolution of Egypt's decision-making is in order. Sadat reached the conclusion the diplomatic option was not going to produce results and that he had to resort to the military option in order to force both Israel and the United States to reevaluate their positions. The problem was to determine which military strategy was feasible given the military balance between the parties. Until June 1972, Sadat and his military commanders did not believe they had a viable military option.

The reasons for such bleak assessments within the Egyptian high command are the lessons learned in the 1967 war and the War of Attrition. In the Six Day War, Egypt learned that it could not fight a blitzkrieg type war against Israel. To regain the Sinai in a general war, Egypt would have had to engage the Israeli forces in the Sinai where any general war involved mobile armored warfare. The Israeli army was superior to the Egyptian army in the air and in armored battles.[139] Thus, a large-scale, mobile, armored battle, involving tanks, aircraft, paratroopers, and motorized artillery and infantry, was ruled out. The major problem Egypt faced was a weak air force that could not provide the necessary air cover to protect ground operations. Any successful attack was at risk of turning into a major failure because of the Israeli air superiority. The Egyptian high command was skeptical of Egypt's capability to conduct even limited military operations and believed that the military balance was actually worsening from Egypt's perspective.[140]

The other option available to Egypt attrition warfare, appeared appealing at first glance. The Egyptian army was better suited for defensive warfare and Egyptian soldiers fought well in such wars.[141] Static defensive warfare was advantageous from Egypt's perspective because the quantitative edge played an important role in such a war and Israel's advantages in mobile warfare was neutralized. In addition, static defensive wars caused many casualties and Israel was known for its sensitivity to casualties. An attrition strategy, however, was ruled out as a viable

option because of the experience gained in the War of Attrition.[142] Israel demonstrated that it had the capability to inflict greater pain on Egypt than Egypt was capable of inflicting on Israel even in a static defensive war. Israel was able to use mobility in a static war and use its air force effectively against SAMs and ground forces as well. Furthermore, the War of Attrition exhausted its usefulness because, after the massive Soviet involvement, it was unlikely that Israel would fight another war of attrition under unfavorable conditions. Renewed attrition warfare was likely to invite a massive Israeli reaction and the Egyptian high command was fully aware of that.

Thus, until June 1972, the Egyptian high command lacked a viable military strategy. Egypt was also deterred from challenging deterrence by Israel's threat to the interior, Egypt's major population centers, and its economic and industrial infrastructure, threats to which Egypt did not have a response. Israel's punishing raids on Egypt's interior during the War of Attrition traumatized the Egyptian military command, who did not envision a successful challenge to Israel without insuring first a comparable counter-threat to Israel's population centers. Surface-to-surface missiles, MiG-23s and SCUDs were necessary before any kind of strategy had even the slightest chance of success.[143]

What eventually enabled Egypt to challenge deterrence and find a successful strategy? Two changes, one in June 1972 and the other in early 1973, enabled Egypt to go to war. First, Egypt's military strategy changed. Egypt designed a limited-aims military strategy that took advantage of its superiority in anti-tank and anti-aircraft weapon systems. On June 6, 1972 during a meeting of the Egyptian high command, Ismail Ali, the Chief of Intelligence, reported that Israeli superiority in the air was still decisive and that Egypt would not be able to attack Israel successfully.[144] In that meeting Sadat said he understood the military's concern about going to war before Egypt had the capability to deter an Israeli attack on Egypt's populations centers. But he also made a major conceptual leap by asking a simple question that no one else asked before. He asked, "What are we to do if the political situation would force us to go to war before we reached the ability to neutralize Israel's threat to attack Egypt's interior?"[145] This question opened the way to Egypt's reconceptualization of its strategy and led to the adoption of a limited-aims strategy which enabled the Egyptians to overcome Israel's deterrence. This question forced the Egyptian high command to think of a third option as an alternative to the diplomatic option and the all-out-war option, alternatives that were losing strategies from Egypt's perspective.[146]

Second, after Sadat's expulsion of the Soviet advisers, arms deliver-

ies from the Soviet Union began reaching Egypt in an accelerated fashion.[147] By August 1973 Egypt had received a large number of anti-tank and anti-aircraft missiles, as well as SCUD missiles which could strike at Israel's population centers. Thus, Egypt's population centers were no longer held hostage to Israeli air superiority, and Egypt could effect a limited ground attack without the fear that Israeli superiority in the air and in mobile warfare would come into play.

Thus, an overall military-political strategy began to emerge and promised for the first time a chance of success. Egyptian decision-makers were no longer in the "domain of loss." Egypt would deliver an assault across the Suez Canal, capture the Bar Lev line and establish 5 bridgeheads of 10 to 15 kilometers in depth, under the cover of SAMs and anti-tank missiles.[148] Then, Egypt would assume a defensive strategy and inflict massive casualties on Israeli forces which, using offensive strategies, would be trying to dislodge the Egyptians from the captured territory.[149] The ultimate goal, however, was not a general military victory but the political repercussions of the limited military challenge. A limited Egyptian victory would force Israel and the United States to reevaluate their positions at the negotiating table.[150]

We see, then, how Egypt's strategy evolved and what were the determining factors in its decision to challenge deterrence. In light of this analysis, how do Stein's criticisms fare? There are two problems with Stein's interpretation. First, Stein's analysis misses the important variables in the causal chain to deterrence failure in the Yom Kippur War. The decisive factor which enabled Egypt to challenge deterrence was the adoption of a limited-aims strategy. Being able to counter Israel's capability to attack Egypt's interior made the decision to challenge easier still. That Egypt decided on a limited-aims strategy the consideration that Egypt was the weaker state, and that future trends indicated that in the near future Egypt was going to get weaker still, were irrelevant issues to the decision to challenge.

Sadat's assessment that Egypt's capability had reached its peak was not the cause for the deterrence failure. His negative assessment of the military trend led Sadat to search for, and adopt, the limited-aims strategy which made the overall relative balance of forces irrelevant. Had Sadat continued to plan a general war ,which was perceived by all Egyptian decision-makers as a losing strategy, Egypt would not have gone to war even if it reached the conclusion that the trends in relative capabilities was only going to worsen with time.[151] The "all-out offensive" strategy led to no offensive because it relied on a decisive, conventional advantage, and an answer to Israel's nuclear capability. Soviet refusal to supply Egypt

with such weapons and guarantees ruled out an all-out offense regardless of the peak Egypt reached, as long as Israel continued to have the above mentioned advantages. For a limited-aims strategy the relative trends in capability, Israel's nuclear option (applicable to vital interests but not to a war in the margins), and the fact that Egypt reached a peak from which its capability was only going to worsen, were irrelevant. The limited-aims strategy was a politico-military strategy, not merely a military one.

Evidence for this conclusion can be seen in another point that challenges Stein's interpretation. The assessment that the trends in relative capability were not going to improve was made as early as June 6, 1972. In the meeting of Sadat with his general command, Shazli discussed the problem of adverse trends in the military balance. Shazli said that Egypt could not wait until its air force would become a realistic match to the Israeli air force and argued that the trend was only going to get worse from Egypt's perspective. Even if Egypt received all the planes it requested from the Soviet Union, argued Shazli, the United States was determined to keep an Israeli superiority over all the Arab confrontation states combined. Israel, according to Shazli, was better at absorbing new airplanes and therefore the military gap was going to remain the same or worsen over time from Egypt's perspective.[152] It is at that meeting that Sadat made the great leap in his conceptualization of the problem by finding an alternative strategy to either diplomacy or all-out war.

We should note that despite the negative assessment of the negative trend a challenge to deterrence did not take place at the time. On the contrary, five months later in October 1972, Sadat had to dismiss his top military commanders for refusing to prepare Egypt for attack. *In the absence of the concept of a limited-aims strategy, despite the assessment of the negative trend, deterrence held.*

That the negative trend in the balance was discussed in other meetings as well can be seen in a meeting of the Egyptian high command on June 20, 1972, organized by the commander-in-chief General Sadeq. At that meeting the director of military intelligence imitated a report by a Soviet journalist in which the journalist asked the Egyptian intelligence commander how Egypt planned to go to war when any time the Soviets supplied Egypt with new weapon systems Israel received newer weapons still. The Soviet journalist observed to the military intelligence field commander that the gap between Israel and Egypt would never close and might even become larger. Does it mean, he asked, that Egypt would never fight?[153]

We see, then, that the Egyptian political and military command was aware that the trend in military capability was adverse from Egypt's per-

spective as early as June 1972. It did not lead to an order to challenge deterrence. It lead to the realization that only a limited-aims strategy was a viable strategy which in turn made the problem of relative capability irrelevant. However, even when Egypt decided on a limited-aims strategy it did not simply decide to challenge. Even within the limits of a limited-aims strategy Egypt worried about Israel's capability to inflict great costs on the Egyptian interior and only *after* the Soviet Union provided Egypt with a counter threat, SCUDs, did Egypt decide that it was in a position to challenge deterrence.[154]

Further evidence that Sadat's decision to challenge in 1973 was not related directly to the assessment that Egypt's military capability had peaked can be seen in the fact that Sadat seriously weakened Egypt's military capability when he decided in July 1972 to expel Soviet personnel. This decision was opposed by Sadat's military advisers who argued that Soviet personnel played a vital role in Egypt's air defense systems as well as in its electronic warfare fighting ability.[155] Thus, the evidence suggests that it is not the case that Sadat's decision to challenge deterrence was made when he assessed that Egypt had reached the peak of its capability but a case in which Sadat reached his decision to challenge deterrence because he found a viable limited-aims strategy in which the overall balance of forces, and their trend, was irrelevant.

In conclusion, Stein's argument that the assessment of future trends played an important role in Egypt's decision to challenge deterrence in 1973 is not supported by a closer analysis of the evidence. The decision to challenge was made after a limited-aims strategy was adopted and this strategy made the issue of relative balance irrelevant. Therefore, the 1973 case is quite different from the 1941 Japanese case. The argument that the challenger's inferiority is only a temporary deterrent because challengers find strategies to design around the defender's superiority will be discussed more fully in the section that evaluates the Yom Kippur War as a deterrence success or failure.

Crisis Bargaining Behavior

This case did not involve a crisis stage in which general deterrence failed first and as a result of the irresolute behavior of the defender an immediate deterrence failure occurred as well. Rather, this is a case in which the challenger preempted. A detailed discussion of the period before the outbreak of the war is, therefore, unnecessary, but a few points are in order. Egypt's preemption is consistent with Fearon's prediction that if the challenger's prior beliefs are that the defender will fight, immediate deter-

rence is unlikely to hold and challenger's are likely to preempt.[156] Immediate deterrence efforts by the defender have no chance of success. At most the challenger might postpone his attack in order to enjoy the benefits of a surprise attack.

One of the reasons Israel was reluctant to mobilize its forces was that the Israeli decision-makers thought that their relationship with Egypt resembled the conditions that characterize a spiral model. The Israeli leaders feared that their defensive actions, mobilization, would make the Egyptian leaders insecure which in turn would trigger an Egyptian attack. Israeli decision-makers should have realized, however, that they operated in a deterrence model and given the warning that Egypt was going to attack, they should have preempted. The Israeli decision was, of course, motivated by their fears that in case they preempted the American administration would stop arms shipments to Israel, arms that might be crucial in a prolonged war.[157]

While the crisis bargaining period before the Yom Kippur War was practically non-existent, the diplomatic phase was quite long. critics of deterrence argue that deterrence will succeed if defenders send, in addition to signals of resolve, signals of reassurance. If defenders provide challengers with diplomatic opportunities in which concessions and reassurance are offered, challengers are likely to have a high expectation of a favorable diplomatic outcome and are less likely to resort to war. When challengers perceive that their goals cannot be attained by diplomacy they resort to war.[158] Israel did offer Nasser the Sinai in return for a peace agreement reached through direct negotiations. Nasser rejected the offer and argued that what was taken by force will be taken back by force.[159] What was Sadat's position?

Stein argues that Sadat was willing to accept a peace agreement without a normalization of relations in return for Israel's withdrawal from the Sinai. Sadat even considered Israel's offer of an interim agreement along the canal. But the two sides were unable to agree on the terms of an agreement. In 1972 Sadat negotiated with the United States in an attempt to get the Americans to pressure Israel to soften its bargaining position. While the perception in Egypt was that the chances for a diplomatic resolution of the conflict were small, as long as there was movement on the diplomatic front, deterrence, according to Stein, held. By 1973, Stein argues, Egypt lost any hope that a diplomatic solution could be found and decided that only a military action was likely to force the parties to the conflict to reevaluate their positions. The challenger's estimate of alternatives to war played, according to Stein, an important role in the failure of deterrence.[160]

The problem with Stein's argument is that there is a difference between a situation in which the defender provided the challenger with opportunities to bargain and negotiate and a situation in which the defender had to capitulate to the challenger's demands. In the period leading to the Yom Kippur War, as well as during the War of Attrition, Israel used reassurance and was willing to negotiate.[161] What Israel could not accept were terms that required it to relinquish the territories without a peace treaty. Sadat's rejection of diplomacy was not a result of an uncompromising Israeli stand. Sadat was unwilling, and Stein notes this, to make the kind of compromises that were necessary to insure the success of the diplomatic process. While Sadat was more accommodating by far than Nasser was in his approach to the resolution of the conflict, and his acts were more than a ploy to drive a wedge between Israel and the West, his actions fell short of the kind of radical change that was necessary to reach a peace agreement. It was not until 1977 that Sadat was willing to consider the kind of a peace agreement that Israel envisioned.

Sadat's position on the interim agreement, as well as his stand on the general terms for a peace settlement, were not acceptable to Israel. Dayan's interim agreement proposal is a good example which demonstrates Israel's attempt to find solutions that would ultimately lead to the resolution of the conflict and that diplomacy failed because Egypt demanded that its conditions be met without addressing Israeli concerns and interests. In October 1970, Israel offered Egypt an interim agreement in which Israel would withdraw its forces from the canal to the Mitla and Gidi strategic passes.[162] The logic of the offer was straightforward. Egypt would be able to reopen the canal and resettle the cities evacuated during the War of Attrition. Egypt would benefit from this arrangement first, by resolving the political problems caused by the displaced population of the canal's cities and second, by collecting the revenues from the canal traffic, revenues which stopped after the closing of the canal as a result of the Six Day War. The reopening of the canal was also perceived in Israel as benefiting the strategic interests of the Soviet Union, Egypt's patron.

Israel would benefit from this arrangement because it would be able to hold onto the Sinai more effectively with a smaller military force. The physical features of the Sinai were such that the two passes created two critical bottlenecks controlling the land access from Egypt to Israel. If the area between the canal and the passes were to be demilitarized, then Israel would have the necessary time to stop the Egyptian forces along the passes, in case of an Egyptian attack, until the Israeli reserves were mobilized and sent to reinforce the front. In addition, the discussion and possible acceptance of the plan held the promise of continued cease-fire and

United States political and material support.

Moreover, this arrangement held the promise of reduced military friction between the Egyptian and Israeli armies. This in turn held the promise of a change in the political atmosphere between the two countries which would enable the establishment of new arrangements that would ultimately lead to a final resolution of the conflict.[163] It is important to note that the alternative to a limited agreement was a general agreement in which Israel's and Egypt's demands were total. Israel demanded total peace. Egypt demanded that Israel return all Arab territories and address the rights of the Palestinians. Israel viewed the last demand as aiming at the dismantling of the Jewish state in favor a Palestinian state. Therefore, a comprehensive agreement was not politically feasible at the time and required a major change in the form and content of the parties' position.

Egypt's response came on February 4, 1971. Sadat demanded an Israeli withdrawal from the canal under a cease-fire agreement as a preliminary step towards an agreement on a timetable for the implementation of Resolution 242. A few days later Sadat demanded that a partial Israeli withdrawal be carried out to a line east of El-Arish. He also declared that the cease-fire would be limited in nature. While he promised to open the canal within six months he said that he would not allow Israeli shipping until Israel withdrew from all Arab territories and resolved the refugee problem. Thus, Sadat's February 4 initiative demanded that Israel withdraw to the El-Arish line, a major Israeli withdrawal, for a period of six months, and immediately thereafter to the international border. Sadat also demanded that Egyptian forces cross into the Sinai and continued to insist that Egypt preserve the right to renew the fighting if a general agreement was not reached.[164]

Israel still viewed Sadat's position as an attempt to get all the territories, including the rights of the Palestinian, without agreeing to reach a reconciliation with the state of Israel.[165] In response to Nixon's April 1 reply, Sadat agreed to practical steps for the separation of forces in the Siani when the Israelis retreated, but argued that Egyptian forces would follow Israeli forces into the Sinai and that the demilitarization of the Sinai was unacceptable to Egypt. When Egypt signed the "Treaty of Friendship" with the Soviet Union on May 25, the Israelis became convinced that Egypt was trying to use the same strategies it used unsuccessfully in the past in its dealing with Israel. Egyptian goals were to regain the Sinai through superpower pressure on Israel without being willing to make any significant concessions in return in order to transform the conflictual relationship into a conciliatory one.

On June 15, 1971 Israel presented its conditions for an interim agree-

ment in which it demanded that the cease-fire be extended indefinitely, that Egyptian troops not be permitted east of the canal, that effective inspection agreements be arranged, that the interim agreement be severed from other Egyptian demands and that further Israeli withdrawals would only take place in return for a peace settlement. Being sensitive to Egypt's need to demonstrate its sovereignty over territories evacuated by Israel, Dayan was willing to consider symbolic Egyptian presence east of the canal if it were not to exceed 750 soldiers.[166] Sadat, however, made the agreement on the interim agreement conditional on Israel's acceptance of Egypt's terms for the final settlement, and was unwilling to say publicly that the PLO might have to accept a small state in the Gaza and the West Bank. Israel was not willing to accept the risks involved. Finally, after another visit to the Soviet Union in October, Sadat rejected the idea of an interim agreement and argued that the issue was not only an Israeli withdrawal from the canal and the Sinai but the rights of the Palestinian people as well. Israel responded positively to Rogers' "proximity talks" idea, but Sadat, after still another visit to the Soviet Union on February 2, 1972, announced that he had terminated his discussions with the Americans.

Sadat's changes of position created in the minds of the Israeli and the American administrations a perception that he was not strong enough to reach a comprehensive peace treaty with Israel. Even Sadat's expulsion of the Soviet advisers was not perceived as a significant concession. Sadat was neither making a complete shift in his alliance policy from the Soviet to the American camp nor was he willing to make a significant concession to the Israelis. In 1972 Sadat still wanted to force the United States to pressure Israel to make concessions instead of making the kind of concessions that were necessary to bring about a change in Israel's perceptions of Egypt's intentions. The United States' position, in the meantime, moved closer to the Israeli position. The United States supported the Israeli demand that the territories would only be exchanged for a full peace and, in the absence of such an arrangement, that the interim agreement would be separate from the more complex Israeli-Palestinian issue.

Egypt demanded that its forces move into the area evacuated by Israel, and that the Israeli withdrawal would be part of a larger timetable for a withdrawal from the rest of the Sinai. Sadat insisted on tying the interim settlement with the general settlement on Arab terms.[167] In response to the proximity talks formula suggested by the United States, Sadat rejected the idea of an interim agreement and claimed that the issue was the territories and the rights of the Palestinians. Israel could not accept Egypt's position because it called for an Israeli withdrawal with-

out a peace agreement. The Israelis feared a repeat of 1956 when an Israeli withdrawal did not lead to a peace treaty.

The argument that the absence of a diplomatic alternative is a major cause for deterrence failure does not fare well in this case. Israel was concerned with reducing Egypt's incentives to challenge deterrence and addressing Egypt's concerns. Israel was willing to relinquish the Sinai in return for full peace. In the event that such a comprehensive settlement was not feasible, Israel was willing to negotiate an interim agreement that would create the conditions for further agreements. The diplomatic option failed not because Israel was not willing to negotiate or address Egyptian concerns but because the gap between the parties was too wide. Sadat was more willing than his predecessor to consider a peace treaty but he was not willing or able to agree to the kind of peace Israel envisioned.

Stein's argument that deterrence held when Egyptian leaders saw some prospect of bargaining and that their choice to use force was motivated by the absence of hope for diplomatic progress is problematic for another reason as well. It is difficult to ascertain the motivation behind Egypt's decision not to challenge in the first period, because the period in which the Egyptian leaders saw some prospect of bargaining coincides with the time when they also did not perceive a viable military option. In other words, Sadat may not have challenged deterrence not because he perceived that a diplomatic opportunity existed but because he did not have the capability to challenge deterrence. Sadat's February 4 initiative is a good example that illustrates the point. There is still a great deal of debate about Sadat's intentions at the time. Whether Sadat's initiative was a sincere attempt to reach an accommodation with Israel or was a ploy to gain time and improve Egypt's capability, as well as to drive a wedge between Israel and the West, is an unresolved issue.[168] On October 24, 1972, at a meeting of the high command, Sadat told his generals that his February 4 initiative was motivated by two considerations. First, Egypt had to gain time because the cease-fire was supposed to expire during that month and Egypt was not ready to renew the fighting. The Soviets not only told Sadat not to expect any military support if the fighting resumed but they also delayed the delivery of missiles that were intended for the defense of Upper Egypt including the Aswan Dam. This consideration played an important role in the deliberations on the resumption of the fighting.[169]

Second, the Egyptian proposal that Egyptian forces cross the canal and occupy the territory evacuated by the Israelis was intended to minimize the costs associated with a canal crossing when the cease-fire agreement ended six months later. Thus Egypt used diplomacy to improve its

military option in case Israel refused to withdraw from the Sinai.[170] This evidence suggests that the availability of bargaining space may have had little to do with deterrence stability. Deterrence held because a military option did not exist and diplomacy was used skillfully to create a military option.

Success or Failure?

Stein's strongest challenge to deterrence theory is that a favorable military superiority does not insure deterrence stability. This is a challenge to the core of the deterrence argument. If Stein's empirical interpretations are correct then her argument indeed poses a major challenge to deterrence theory. According to Stein, "an estimate of inferior military capability was only a temporary deterrent to a use of force."[171] Such estimates of weakness, according to Stein, do not insure deterrence stability but spur military planners to design around the defender's superiority. She argues that "given the ingenuity of the military mind and the flexibility of modern multipurpose conventional technology, development of such a strategy was only a matter of time."[172]

The counter-point to Stein's argument is, first, that the difficulty the Egyptian political and military elite had in conceptualizing the limited-aims strategy indicates that designing around is not an easy task that can be easily reached given enough time. It may require, as Shamir argues, creative leaps in conceptualization which do not occur often.[173] Second, a defender who is successful in narrowing the range of available options over time makes the task that much more difficult. An infinite number of strategies simply does not exist. Finally, while attrition warfare and limited-aims strategies indicate the failure of deterrence on one level they indicate deterrence success on another. The fact that the challenger used attrition and limited-aims strategies indicate that he was incapable of executing the more dangerous all-out-war strategy. When a lower-level challenge is used for more limited goals deterrence succeeds.

When el-Badri describes the strategies that were available to the Egyptian high command as either a return to the War of Attrition or the launching of a limited war, he fails to describe the process which led the Egyptian high command to adopt the limited-aims strategy as well as discuss when the option became viable.[174] The attrition strategy was not a viable strategy as a result of the lessons the Egyptian high command learned from the War of Attrition. The limited-aims strategy did not exist, conceptually, in the minds of the Egyptian military high command at least until June 1972. Until that date, the only strategy contemplated by the

Egyptian high command was an all-out-war strategy which meant, given the balance of capability that prevailed between Egypt and Israel, a no-war strategy.

In a meeting with his high command on December 30, 1970, Sadat said, for example, that Egypt's forces should be ready to renew the fighting when the cease-fire expired on February 7, 1971, even if the Soviet Union did not renew its arms deliveries.[175] Sadat nevertheless renewed the cease-fire agreement on February 4 and argued, in a meeting held on March 23, 1971, that he was in the midst of a diplomatic campaign to isolate Israel and could not renew the fighting because that goal would not be achieved if Egypt renewed the fighting.

On January 2, 1972 Sadat held a meeting with his military commanders to evaluate the military balance. All the commanders complained about the fact that Egyptian capabilities did not improve and that the Soviets were slow to comply with the arms agreement signed on October 17, 1971. A major concern that haunted the Egyptian high command was Israel's ability to strike deep inside Egypt and the vulnerability of Egypt's populations centers.[176]

The meeting on June 6, 1972 of the Egyptian High Command was a turning point in Egypt's conceptualization of its available options. During the meeting, Ismail Ali, the Chief of Intelligence, reported that Israeli superiority in the air was still decisive and that Egypt would not be able to attack Israel successfully.[177] In that meeting Sadat said that he understood the military's concern about going to war before Egypt had the capability to deter an Israeli attack on Egypt's populations centers. But he also made the major conceptual leap by asking the simple question that no one else asked before. He asked, "what are we to do if the political situation would force us to go to war before we reached the ability to neutralize Israel's threat to attack Egypt's interior?"[178] This question opened the way to Egypt's reconceptualization of its strategy and lead to the adoption of a limited-aims strategy which enabled the Egyptians to overcome Israel's deterrence. This question forced the Egyptian high command to seek an alternative to the all-out-war option.[179]

Shimon Shamir, in his introduction to Shazli's book, remarked that Sadat's conceptual leap is similar to other innovations in that it poses a question in all its simplicity, a question that no one else asked or considered before. Such questions lead to major reevaluations of conventional thinking and to creative discoveries in politics as well as in science.[180] This point sheds an interesting light on Stein's argument that developing a 'designing around' strategy is just a matter of time. First, as Shamir's interpretation suggests, finding strategies which design around a defend-

er's capability is not an easy matter. It requires creative leaps in conceptualizing a problem and that may or may not occur. The fact that the Israelis did not conceive the possibility that the Egyptians would adopt a limited-aims strategy is indicative of the problem. Israel's conception of the options available to Egypt included only a general attack to recapture the whole Sinai or a replay of the War of Attrition. Their force structure was designed to meet these two options but not the limited-aims strategy.

Second, and more importantly, the number of options that are available to a challenger is not infinite and it narrows significantly as the enduring rivalry goes through a few deterrence failures. As this case illustrates, Egyptian planners had no other option left but a limited-aims strategy. All the other options were ruled out as a result of lessons learned in previous deterrence encounters.

Stein's argument that the War of Attrition and the 1973 war illustrate the failure of deterrence because challengers always find ways to design around the superior capability of the defender needs to be reexamined and reinterpreted in a different light. As a result of the lessons learned throughout the period and especially during the 1967 war, the nature of the Egyptian military challenge and its goals changed. Rather than challenging Israel's intrinsic interests for the purpose of building a leadership position in the Arab world, regaining the Sinai became the main goal.[181] Attaining it in a general war was no longer perceived as a viable strategy.[182] The War of Attrition and the 1973 war were fought for the regaining of the Sinai and were limited in nature; attrition in the first challenge and the capturing of a narrow strip on the East bank of the canal in the latter. Thus, the success of deterrence can be detected in the fact that the challenger sought more limited goals and realized that the range of options available to him to achieve these goals had narrowed down.

The Yom Kippur War, the last Egyptian challenge, is a good case in point. While Lebow and Stein consider the war a major failure of deterrence theory because it demonstrates that highly motivated challengers are willing to go to war when the balance of capability favors the defender, the nature of the war and its conduct are rather indicative of deterrence success. The 1973 Egyptian war plans provide a good example of Israel's credible deterrent threats. First, Egypt's behavior before the 1973 war contrasts sharply with Egypt's behavior in 1967. In 1967, Egypt all but welcomed a confrontation while in 1973 it went to war knowing it would consider the war a success if very limited objectives were achieved. Second, of the three military options available to Egypt—blitzkrieg, a war of attrition, and a limited-aim war, only the last option was perceived to be viable as a result of reputations developed by Israel in the 1967-1970

period. The strategy of blitzkrieg was written off because of the 1967 experience.[183] And the strategy of a war of attrition was rejected because Israel demonstrated its willingness to pay a high cost in men and material during the 1969-1970 War of Attrition. Egypt also feared that Israel would escalate the conflict.[184]

Thus, the use of force does not necessarily reflect deterrence failure but at times it demonstrates deterrence success. The longer term historical perspective shows that the plans to capture a narrow strip of land in the Sinai posed no existential threat to Israel's survival. The real test of deterrence success, to use Rabin's words, is whether deterrence "deflected [the challenger] to a less dangerous [challenge]."[185] It did, because Israel's reputation for capability reached mythological proportions, as can be seen in the fact that both Syria and Egypt would not exploit their initial successes.[186] After the Yom Kippur War, which almost ended in another disaster, Sadat was willing to make the necessary concessions he was unwilling to make only two years earlier, beginning a process that eventually led to the signing of a peace treaty.[187] Stability on the Egyptian-Israeli axis exists to this day.[188]

3.
CONCLUSION

In conclusion, Lebow and Stein's main argument that "weakness at home or abroad" leads challengers to challenge deterrence even when the defender's threat is credible, is not supported by the evidence. The War of Attrition and the Yom Kippur War, as well as other deterrence encounters in the Egyptian-Israeli rivalry, indicate that highly motivated challengers challenge deterrence only when they perceive an opportunity in terms of an incredible deterrent threat, but refrain from a challenge when the deterrent threat is credible even when the pressures to challenge are great.[189] A longitundinal study of deterrence demonstrates that the motivation and the desire of the Egyptian leadership to challenge deterrence existed throughout the period, that the Egyptian leadership did not micalculate the balance of capability because of the political pressures to challenge deterrence, and that deterrence failed only when the Egyptian leadership believed that an opportunity existed. Thus, the role of deterrence policies in adversarial relations must be understood in terms of their long-term cumulative impact. Short-term deterrence failures may be a necessary condition for long-term deterrence success.

The policy implication of this finding is that, when confronted with a determined challenger, policy makers need to design their policies with a long-term perspective in mind because the requirements for deterrence stability can only be created through war.[190] Specific reputations for capability and will, the variables which make deterrent threats credible, are created, in the conventional world, through the ultimate test of capability and resolve, war.

This finding, which interestingly enough is supported by the deterrence encounters between the United States and Iraq in the 1990s, requires further empirical support before it is adopted by policy-makers. But it can be explained deductively.[191] To deter, resolute defenders need to distinguish themselves from irresolute actors. Demonstrating resolve is achieved by maintaining control over the escalatory ladder of the conflict[192]—which implies the need to go over the brink—actions which are

too costly for irresolute actors to mimic. The problem that defenders confront is that nothing short of a tough policy will work. This is due to what Frank calls the "costly to fake principle."[193] This principle tells us that the credibility of signals between adversaries depends on how costly or difficult it is to fake them. Because retaliation or mobilization may be "cheap," and even a defender who bluffs is likely to behave this way, convincing the challenger that the defender is tough requires that the defender adopt the kind of policy which an impostor would consider too costly to adopt and mimic. Taken to its logical conclusion this argument implies that a defender must adopt a policy of retaliation, escalation, and war. The willingness to go to war is the ultimate test of resolve.

Defenders find it even more difficult to demonstrate their resolve when extrinsic interests are challenged and there is uncertainty about a government's will to pay the high costs that may be necessary to attain them. Not only are the costs higher than the benefits, but they are incurred immediately, while the benefits may be reaped sometime in the future. We saw that, in the absence of a peace treaty, Israel had to demonstrate its will to hold on to the canal during the War of Attrition. Thus, the dilemma for leaders is that acting tough may require going to war, which is costly immediately and only may have payoffs in the future. "Impulse control problems," the well-documented tendency in which individuals prefer immediate gains at the expense of larger benefits in the future, are not easily overcome and irresolute actors back down.[194]

The reasons that reputations for capability can also only be created through war is two-fold. First, demonstrations of capability in situations short of a general war can be discounted by the challenger as not reflecting the overall balance of capabilities. The performance of the Israeli air force just before the Six Day War, for example, did not convince the Egyptians that this capability existed in the other branches of the Israeli army or that in a general war such demonstrations could be repeated on a larger scale.

Second, even a general war may not be sufficient to create reputations for capability. The reason being that, as the Egyptian case indicates, leaders in challenging states, in the initial phases of the conflict, tend to attribute the unsuccessful outcome of the war not to the capability of the defender but to shortcomings in their own military organizations. Thus, once the problems are identified at the tactical and strategic levels, and are corrected, challengers believe they can embark on new challenges. In addition, because the balance of capabilities depends on many variables, changes in any one of them can make certain reputations irrelevant. Reputations created during any particular cycle can erode because the

challenger believes that new arms transfers or new technological breakthroughs might offset any particular superiority a defender is able to display. To convince a challenger that the defender has a certain fundamental advantage, a human resource capability for example, and that short term changes, such as arms transfers and/or technological breakthroughs, are not sufficient to offset the superiority of the defender requires repeated failures. Repeated failure force a challenger to confront the more fundamental conditioning factors that are responsible for the outcome.[195] It is then that reputations for capability are created and sustained.

In conclusion, deterrence works, and it works even against highly motivated "non-deterrables." Unfortunately, in order to make deterrence work in the conventional world states may have to fight wars to create reputations for capability and will: the requirements for deterrence—*success*; and the foundation for long-term deterrence—*stability*.

Notes

1. Christopher H. Achen and Duncan Snidal, "Rational Deterrence Theory and the Comparative Case Studies," *World Politics* 41, no. 2 (January 1989): 143-69. On the requirements for successful deterrence see, William W. Kaufmann, *The Requirements of Deterrence* (Princeton: Center for International Studies, 1954); Glenn H. Snyder, *Deterrence and Defense: Toward a Theory of National Security* (Princeton: Princeton University Press, 1961); Thomas Schelling, *The Strategy of Conflict* (New York: Oxford University Press, 1963); idem., *Arms and Influence* (New Haven, CT: Yale University Press, 1966); Oran Young, *The Politics of Force: Bargaining During International Crises* (Princeton: Princeton University Press, 1968).

2. The empirical findings on the relationship between capability and deterrence stability are inconclusive. While some empirical findings support the preponderance hypothesis, other studies do not support the proposition that the overall balance of military power effects the likelihood of deterrence success and war initiation.

Studies which support the argument that a favorable balance of capabilities insure deterrence stability include: Erich Weede, "Overwhelming Preponderance as a Pacifying Condition Among Asian Dyads, 1950-1969," *Journal of Conflict Resolution* 20, no. 3 (September 1976): 395-411; David Garnham, "Dyadic International War: 1816-1965," *Western Political Quarterly* 29, no. 2 (June 1976): 231-42; Cynthia A. Cannizzo, "The Costs of Combat: Death, Duration and Defeat," in J. David Singer, ed., *The Correlates of War* vol. 2, (New York: Free Press, 1980), 233-57; Randolph M. Siverson and Michael R. Tennefoss, "Power, Alliance, and the Escalation of International Conflict, 1815-1965," *American Political Science Review* 78, no. 4 (December 1984): 1057-69; Bruce Bueno de Mesquita, *The War Trap* (New Haven, Conn.: Yale University Press, 1981); Paul Huth and Bruce Russett, "What makes deterrence work? Cases from 1900 to 1980," *World Politics* 36, no. 4 (July 1984): 496 526; idem., "Deterrence Failure and Crisis Escalation," *International Studies Quarterly* 32, no. 1 (March 1988): 29-46; idem., "Testing Deterrence Theory: Rigor Makes a Difference," *World Politics* 42, no. 4 (April 1990): 466-501; Paul Huth, Extended *Deterrence and the Prevention of War* (New Haven: Yale University Press, 1988), and Huth, "Extended Deterrence and the Prevention of War," *American Political Science Review* 82, no. 2 (June 1988): 423-44.

Studies which show that a preponderance of capability does not insure stability include: Zeev Maoz, "Resolve, Capability, and the Outcomes

of Interstate Disputes, 1816-1976," *Journal of Conflict Resolution* 27, no. 2 (June 1983): 195-229; Frank J. Wayman, J. D. Singer, and Gary Goertz, "Capabilities, Military Allocations, and Success in Militarized Disputes," *International Studies Quarterly* 27, no. 4 (December 1983): 497-515; J. David Singer and Melvin Small, "Foreign Policy Indicators: Predictors of War in History and in the State of the World Message," *Policy Sciences* 5, no. 3 (September 1974): 271-96; Dina A. Zinnes, Robert C. North, and Howard E. Koch, Jr. "Capability, Threat, and the Outbreak of War," in James N. Rosenau, ed., *International Politics and Foreign Policy* (New York: Free Press, 1961), 469-482.

We should note that in the studies which find support for the preponderance hypothesis the evidence is not conclusive. In Huth's and Russett's project, for example, cases of deterrence success may include cases in which the challenger did not seriously considered an attack. See Jim Fearon, "Bayesian Learning and Costly Signaling in International Crises" (Ph.D. diss., University of California, Berkeley, 1992), ch. 5.

3. Richard Ned Lebow, *Between Peace and War: The Nature of International Crisis* (Baltimore: The John Hopkins University Press, 1981); Robert Jervis, Richard Ned Lebow, and Janice Gross Stein, eds., *Psychology and Deterrence* (Baltimore: The John Hopkins University Press, 1985); Richard Ned Lebow, "Deterrence: A Political and Psychological Critique," in Paul C. Stern, Robert Axelrod, Robert Jervis and, Roy Radner, eds., *Perspectives on Deterrence* (New York: Oxford University Press, 1989); Richard Ned Lebow and Janice Gross Stein, "Rational Deterrence Theory: I Think, Therefore I Deter," *World Politics* 41, no. 2 (January 1989): 208-24; Robert Jervis, "Deterrence and Perception," in Steven E. Miller ed., *Strategy and Nuclear Deterrence: An International Security Reader* (Princeton: Princeton University Press, 1984).

4. Richard Ned Lebow and Janice Gross Stein, "Deterrence: The Elusive Dependent Variable," *World Politics* 42, no. 3 (April 1990): 336-69.

5. Ibid., 348.

6. For a good discussion of the diversionary theory of war, or the scapegoat hypothesis, see Jack Levy, "The Diversionary Theory of War," in Manus I. Midlarski, ed., *Handbook of War Studies* (Boston: Unwin Hyman, 1989).

7. The study of enduring rivalries has gained renewed interest lately in the international relations literature. On May 1-2, 1993 a special conference was held on the topic at Indiana University in Bloomington, IN, under the leadership of William Thompson.

8. The theoretical arguments advanced by the competing frameworks, the rational deterrence model (RDT) and advocates of the "weakness thesis," or critic of deterrence, can be found in Elli Lieberman, "The Rational Deterrence Theory Debate: Is the Dependent Variable Elusive?" *Security Studies* 3, no 3, (Spring 1994): 384-427; and Lieberman, "Testing Deterrence Theory: Success and Failure in the Enduring Rivalry Between Egypt and Israel, 1948-1979" (Ph.D. diss. University of Chicago, Chicago, 1993).

9. On the War of Attrition see, Jonathan Shimshoni, Israel and

Conventional Deterrence: Border Warfare from 1953 to 1970 (Ithaca: Cornell University Press, 1988), ch. 4; Yaacov Bar-Siman-Tov, *The Israeli-Egyptian War of Attrition, 1969-1970: A Case Study of Local Limited War* (New York: Columbia University Press, 1980); Ahmed S. Khalidi, "The War of Attrition," *Journal of Palestine Studies* 3 no. 1 (Autumn 1973): 60-87; Dan Schueftan, *Attrition: Egypt's Post War Political Strategy, 1967-1970* [in Hebrew] (Tzahal, Ministry of Defense Publication, 1989); Lawrence Whetten, *The Canal War: Four-Power Conflict in the Middle East* (Cambridge, Mass.: The MIT Press, 1974); Yitshak Arad, ed., *Elef ha-Yamim, 12 Yuni 1967-8 August, 1970* [1000 days, 12 June 1967-8 August 1970] (Tel-Aviv, 1972); Mordechai Naor, *Hamilhama leachar ha-Milhama* [The War After the War] (Tel-Aviv, 1970); Edgar O'Ballance, *The Electronic War in the Middle East 1968-1970* (London, 1974); Edward Luttwak and Dan Horowitz, The Israeli Army (London: Allen Lane, 1975); Ze'ev Schiff, *A History of the Israeli Army: 1874 to the Present* (New York, N.Y.: Macmillan Publishing Company), ch. 12; Avner Yaniv, *Deterrence without the Bomb: The Politics of Israeli Strategy* (Lexington, Mass.: Lexington Books, 1987). Dan Schueftan's book, *Attrition* is a good source for the perceptions of four important Egyptian decision-makers during the War of Attrition: Egypt's President Nasser, the Editor of Al-Ahram Heykal, the Minister of War Fawzi, and the general secretary of the President's office Farid. Scheuftan relies on many Arab sources and documents as well as on a book by Fawzi, *The Three Year War.*

10. Janice Gross Stein, "Calculation, Miscalculation, and Conventional Deterrence I: The View from Cairo," in Jervis et al, *Psychology and Deterrence,* 37.

11. This study focuses on the rational deterrence theory debate and the way evidence from the War of Attrition is used in this debate. This study does not attempt to address other debates that use the War of Attrition as a case study. For arguments critical of Israel's decision to escalate the war see, Avi Shlaim and Raymond Tanter," Decision Process, Choice, and Consequences: Israel's Deep Penetration Bombing in Egypt, 1970," *World Politics* 30, no. 4 (July 1978).

12. Stein, "Calculation, Miscalculation, and Conventional Deterrence," 41.

13. On "designing around" as a cause for deterrence failure see, Alexander L. George and Richard Smoke, *Deterrence in American Foreign Policy: Theory and Practice* (New York: Columbia University Press, 1974), and, George and Smoke, "Deterrence and Foreign Policy," *World Politics* 41, no. 2 (January 1989), 170-83.

14. Stein, "Calculation, Miscalculation, and Conventional Deterrence," 43-49. See also Khalidi, "The War of Attrition," 76-82.

15. Ibid., 45.

16. Nasser's choice of an attrition strategy cannot be understood in the absence of an analysis that incorporates the learning that took place from 1948 to 1967. Stein does address the period of deterrence stability between the War of Attrition and the 1973 war but for unexplained reasons her longer term perspec-

tive does not include the events from the end of the 1967 war to March, 1969, when the main phase of the War of Attrition began.

17. On the importance of interests for the stability of deterrence see Glenn Snyder, *Deterrence and Defense* 30-31; Robert Jervis, "Deterrence Theory Revisited," *World Politics* 31, (January 1979), 314-315; Bernard Brodie, *War and Politics* (New York: Macmillan, 1973), ch. 8.

18. Stephen Maxwell, *Rationality in Deterrence* Adelphi Paper no.50 (London, 1968).

19. Snyder's and Diesing's find that challengers, in most cases, do not make explicit estimation of the defender's interests. See Glenn H. Snyder and Paul Diesing, *Conflict among Nations* (Princeton: Princeton University Press, 1977). Lebow asserts that challengers frequently resort to force anticipating that defender will acquiesce rather than fight back. On this point see Lebow, *Between Peace and War.*

20. Schueftan's, Attrition, 37-63, 97-111; Shimshoni, *Israel and Conventional Deterrence*, 171-175; Khalidi, "The War of Attrition," 62, 77.

21. Yaniv, "*Deterrence without the Bomb*," 138.

22. Heykal, in *Al-Ahram*, 7 March 1969, cited in Shimshoni, *Israel and Conventional Deterrence*, 171.

23. Shabtai Teveth, *Moshe Dayan: The Soldier, The Man, The Legend* (Boston: Houghton Mifflin Company, 1973), 597.

24. Schueftan, *Attrition*, 41.

25. Adeed I. Dawisha, *Egypt in the Arab World:The Elements of Foreign Policy* (New York: Wiley, 1976), 51; Fouad Ajami, *The Arab Predicament: Arab Political Thought and Practice Since 1967* (Cambridge: Cambridge University Press, 1984).

26. Hassanain Heykal, "The Strategy of the War of Attrition," in Walter Laqueur and Barry Rubin, eds., *The Israel-Arab Reader: A Documentary History of the Middle East Conflict* (New York: Penguin Books, 1987), 414-27. In 1967 Nasser originally thought that war preparation would take months, then three years, and in the end he realized that five years was a more realistic target. For an extensive analysis of the Egyptian leadership's perceptions of Egypt's limited capabilities see, Scheuftan, *Attrition.*

27. Daniel Dishon, ed., *Middle East Record* (Jerusalem: Israel Universities Press, 1971-1977), vol. 3, 261-262.

28. Heykal, "The Strategy of the War of Attrition," 418.

29. Heykal, in *Al-Ahram*, 7 March 1969, cited in Scheuftan, *Attrition*, 162.

30. Dawisha, *Egypt in the Arab World.*

31. Muhammed Fawzi, *The Three Year War*, 375-376, cited in Scheuftan, Attrition, 107.

32. Kerr, *The Arab Cold War*, 131-132; Daniel Dishon, *Inter-Arab Relations 1967-1973* An Occasional Paper (Tel-Aviv, 1974), 5.

33. Varda Ben-Zvi, "The Decline of Egypt in the Arab World: From Khartum to Rabat," in Shimon Shamir, ed., *The Decline of Nasserism, 1965-*

1970: The Waning of a Messianic Movement [Hebrew] (Tel Aviv: Tel Aviv University, 1978), 267-86.

34. Evron, *The Middle East*, 178-186.

35. Bar-Siman-Tov, *The Israeli-Egyptian War*, 87.

36. Dan Margalit, *Sheder mea-Bayit ha-Lavan: Aliyato u-Nefilato shel Memshelet ha-Likud ha-Leumi* [Message from the White House: The Rise and Fall of the National Unity Government] (Tel-Aviv, Otpaz, 1971), 215, and Khalidi, "The War of Attrition," 83-85.

37. Stein, "Calculation, Miscalculation, and Conventional Deterrence," 39-40.

38. Moshe Dayan, *Avnei Derekh*, [Story of My Life], (Tel-Aviv: Dvir, Yedioth Ahronoth Edition, 1976), p. 513; Dishon, ed., *Middle East Record*, pp. 582-583; Mohammed Heykal, *The Road to Ramadan*, (New York: Ballantine Books, 1975), p 48; *Nasser's Speeches*, 1969-1970, pp. 75-92.

39. Muhammed Fawzi, *The Three Year War*, 228, cited in Scheuftan, *Attrition*, 136.

40. Anwar el-Sadat, *In Search of Identity: An Autobiography* (New York: Harper & Row, 1977), 150.

41. Heykal, "The Strategy of the War of Attrition," 416.

42. Shimshoni, *Israel and Conventional Deterrence*, 197.

43. Heykal, "The Strategy of the War of Attrition," 418.

44. Shimshoni, *Israel and Conventional Deterrence*, 194.

45. Al-Ahram, 23 August 1968, cited in Bar-Siman-Tov, *The Israeli-Egyptian War*, 50-51.

46. Muhammed Fawzi, *The Three Year War*, 188-89, 194-95, 345-47, cited in Scheuftan, *Attrition*, 50-62.

47. Scheuftan, *Attrition*, 198.

48. Ibid., 205.

49. Ibid., 224-25. Scheuftan relies for his evidence on the Middle East News Agency reports from Cairo, October 2 and 10, 1969, and November 7 and 21, 1969.

50. Huth, *Extended Deterrence and the Prevention of War*, 41.

51. John Mearsheimer, *Conventional Deterrence* (Ithaca, N.Y.: Cornell University Press, 1983).

52. Stein, "Deterrence and Miscalculated Escalation," 20; Lebow and Stein, "When Does Deterrence Succeed,"; Lebow, "Deterrence Failure Revisited," 209.

53. Stein, "Calculation, Miscalculation, and Conventional Deterrence," 41-49.

54. Ibid., 45, and Khalidi, "The War of Attrition," 78-80.

55. Jon D. Glassman, *Arms for the Arabs: The Soviet Union and the War in the Middle East* (Baltimore: John Hopkins University Press, 1975), ch. 4; Alvin Z. Rubinstein, *Red Star Over the Nile: The Soviet- Egyptian Influence Relationship Since the June War* (Princeton, N.J.: Princeton University Press, 1977), 29-31; Michael Brecher, *The Foreign Policy System of Israel: Setting,*

Images, Process (New Haven, Conn: Yale University Press, 1972), 87-89.

56. The discussion of the balance of capability is based on Avner Yaniv, *Deterrence without the Bomb,* ch. 4; Shimshoni, *Israel and Conventional Deterrence*, 189-198; Geoffrey Kemp, "Israel and Egypt: Military Force Posture 1967-1972," in F. B. Horton, A. C. Rogerson, and E. L. Warner, eds., *Comparative Defense Policy* (Baltimore: The Johns Hopkins University Press, 1973), and Hans Rattinger, "From War to War: Arms Races in the Middle East," *International Studies Quarterly* 20, no. 4 (December 1976): 501-531.

57. Shimshoni, *Israel and Conventional Deterrence*, 191.

58. Scheuftan, *Attrition*, 204-205.

59. Zeev Schiff, *Knafayim me'al Suez* [Phantom over the Nile: The Story of the Israeli Air Corps], (Haifa: Shikmona, 1970), 44-46; Shlaim and Tanter, "Decision Process," 484 and Scheuftan, *Attrition*, 197.

60. Heykal, "Thc Strategy of the War of Attrition," 418.

61. Schiff, *Knafayim me'al Suez,* 190; Shlaim and Tanter," Decision Process," 486, and Bar-Siman-Tov, *The Israeli-Egyptian War*, 89.

62. Heykal, "The Strategy of the War of Attrition," 418.

63. Khalidi, "The War of Attrition," 63.

64. Schiff, *Knafayim me'al Suez*, 23.

65. `Shlaim and Tanter, "Decision Process," 489.

66. Heykal, "The Strategy of the War of Attrition," 423-426.

67. Ibid., 423.

68. Ibid., 422.

69. On the conversation with Tito see Abd al-Majid Farid, *Al-Dustur*, 21 August 1978, 33-34, cited in Scheuftan, Attrition, 129. In the same article Farid quotes Nasser explaining to the Jordanian Prime Minister as well as to the Iraqi President that while Egypt may be able to defend herself it was far from being able to mount a successful attack to recapture the Sinai.

70. *Nasser's Speeches,* 1969-1970, 75-92; see also Nasser's addresses on 27 March 1969, 1 May 1969, 23 July 1969, cited in Scheuftan, Attrition, 153.

71. Dishon, *Middle East Record*, 125-126.

72. Scheuftan, *Attrition*, 159.

73. Heykal, *The Road to Ramadan*, 62.

74. Ibid., 165.

75. O'Ballance, *The Electronic War*, 31-32.

76. Nasser's 23 November 1967 speech, cited in Scheuftan, *Attrition*, 125.

77. el-Sadat, *In Search of Identity*, 150.

78. Ibid., 196; Saad el-Shazli, *The Crossing of the Suez* (San Francisco: American Mideast Research, 1980), 12; Scheuftan, Attrition, 135-6.

79. Khalidi, "The War of Attrition," 63.

80. Barry O'Neill, "The Strategy of Challenges: Beheading Games in Mediaeval Literature and Superpower Contests in the Third World," (April, 1990); Schelling, *The Strategy of Conflict*; Idem, *Arms and Influence*; On the concept of reputations in the literature of economic game theory see Reinhard

Selten, "The Chain-Store Paradox," *Theory and Decision* 9, (1978): 27-59; David M. Kreps and Robert Wilson, "Reputation and Imperfect Information," *Journal of Economic Theory* 27, (1982): 253-279; Paul Milgrom and John Roberts, "Predation, Reputation, and Entry Deterrence," Journal of Economic Theory 27, (1982): 280-312; Robert Wilson,"Deterrence in Oligopolistic Competition," in Paul C. Stern, Robert Axelrod, Robert Jervis and, Roy Radner, eds., *Perspectives on Deterrence* (New York: Oxford University Press, 1989).

81. Jervis, " Deterrence Theory Revisited," 315; Michael Desch, "The Keys That Lock Up the World: Identifying American Interests in the Periphery," *International Security* 14, (1989): 86-121; Maxwell, *Rationality in Deterrence*, and Patrick M. Morgan, "Saving Face for the Sake of Deterrence," in Jervis, Lebow and Stein, eds., *Psychology and Deterrence.*

82. Stein, "Calculation, Miscalculation, and Conventional Deterrence," 44.

83. Heykal, "The Strategy of the War of Attrition," 423.

84. Khalidi, "The War of Attrition," 78.

85. Shimshoni, *Israel and Conventional Deterrence*, 188.

86. Khalidi, "The War of Attrition," 83-85; Dan Margalit, *Sheder mea-Bayit ha-Lavan*, 84-95; Michael Brecher, *Decisions In Israel's Foreign Policy* (New Haven, Conn: Yale University Press, 1975), 462-463; Yaniv, *Deterrence without the Bomb*, ch. 4.

87. Stein, "Calculation, Miscalculation, and Conventional Deterrence," 44.

88. Heykal, *The Road to Ramadan*, 78-85; Sadat, *In Search of Identity*, 151-152; Dishon, *Middle East Record*, 44-45; Rubinstein, *Red Star Over the Nile*, 105-113; Ya'acov Ro'i and Ilana Dimant Kass, "The Soviet Military Involvement in Egypt, January 1970-July 1972," The Soviet and East European Research Center, Research Paper no. 6, (Jerusalem: The Hebrew University, February 1974): 8-12.

89. Despite the otherwise excellent study of Israel's deterrence policies, Shimshoni's argument that Israel "lost her first war" in the War of Attrition is a bit exaggerated. See, Shimshoni, *Israel and Conventional Deterrence*, 170. For a convincing argument that Israel attained its objectives and the apparent draw was due to Soviet intervention see Schueftan, *Attrition*, 395-411.

90. For a description of the Israeli raids see Shimshoni, *Israel and Conventional Deterrence*, 123-170; Bar-Siman-Tov, *The Israeli-Egyptian War*; Yaniv, *Deterrence without the Bomb*, ch. 4; Schueftan, Attrition.

91. Shimshoni, *Israel and Conventional Deterrence*, ch. 4, and Shlomo Aronson, *Conflict and Bargaining in the Middle East: An Israeli Perspective* (Baltimore: Johns Hopkins University Press, 1978), 136.

92. Jervis, "Deterrence and Perception," 66-67.

93. Barry Nalebuff, "Rational Deterrence in an Imperfect World," World Politics 43, no. 3 (April 1991): 313-335.

94. Paul Huth, *Extended Deterrence and the Prevention of War*, 6.

95. Fearon, "Deterrence and the Spiral Model."

96. This argument is made not only by critics of deterrence but by some deterrence theorists as well. See Huth, *Extended Deterrence and the Prevention of War*, 51-53.

97. Khalidi, "The War of Attrition," 85.

98. Abba Eban, *Personal Witness: Israel Through My Eyes* (New York: G.P.Putnam's Sons, 1992), 492. On the consensus which existed on this point in the Israeli government see Yair Evron, *The Middle East: Nations, Superpowers and Wars* (New York: Simon & Schuster, 1985), 59.

99. Mahmud Riad, *The Struggle for Peace in the Middle East* (New York: Quartet Books, 1981), 143.

100. Schueftan, *Attrition*, 407-409.

101. Russel Leng, "When Will They Ever Learn: Coercive Bargaining in Recurrent Crises," *Journal of Conflict Resolution* 27, no. 3 (September 1983): 379-419.

102. Stein, "Calculation, Miscalculation, and Conventional Deterrence," 37.

103. Yehoshafat Harkabi, *Arab Strategies and Israel's Response* (New York: The Free Press, 1977).

104. Hassan el Badri, Taha el Magdoub, and Mohammed Dia el Din Zohdy, *The Ramadan War, 1973* (Dunn Loring, Va.: T.N. Dupuy, 1978).

105. Janice Gross Stein, "Calculation, Miscalculation, and Conventional Deterrence," 45-48.

106. Richard D. Anderson, Margaret G. Herman and Charles Herman, "Explaining Self-Defeating Foreign Policy Decisions: Interpreting Soviet Arms for Egypt in 1973 through Process or Domestic Bargaining Models?" *American Political Science Review* 86, no. 3 (September 1992): 759-767.

107. Stein, "Calculation, Miscalculation and Conventional Deterrence," 38-41. Stein's article uses the Egyptian decision-making during the period leading to the 1973 war to challenge deterrence theory.

For a perspective which tries to explain Egyptian decision-making on rational grounds see, John Mearsheimer, *Conventional Deterrence*, 155-162.

Memoirs and narrative histories of the Egyptian decision-making process during the period before the war can be found in Mohammed Heykal, *Nasser: The Cairo Documents* (London: New English Library, 1972); Heykal, *The Road to Ramadan*; Heykal, *The Sphinx and the Commissar: The Rise and Fall of Soviet Influence in the Middle East* (New York: Harper & Row, 1978); el Badri, *The Ramadan War*; el-Shazli, *The Crossing*; and el-Sadat, *In Search of Identity*.

An excellent study of the evolution of Sadat's policies towards Israel is Shimon Shamir, *Egypt Under Sadat: The Search for a New Orientation* [Hebrew] (Tel-Aviv: Dvir, 1978).

For an Israeli perspective see Hanoch Bartov, *Dado: 48 Years and 20 Days* [Hebrew] (Tel-Aviv: Ma'ariv, 1978); Avraham Adan, *On the Banks of the Suez* (Novato, Calf.: Presidio, 1980); Zeev Schiff, *October Earthquake* (New Brunswick, N.J.: Transaction Publications, 1974); Ze'ev Schiff, *A*

History of the Israeli Army; Edward Luttwak and Dan Horowitz, *The Israeli Army* (London: Allen Lane, 1975); Yaniv, *Deterrence without the Bomb*, ch. 4. A detailed analysis of the diplomatic process during the period can be found in Aronson, *Conflict and Bargaining*, ch. 3.

On the war see Trevor N. Dupuy, *Elusive Victory: The Arab-Israeli Wars, 1947-1974* (New York: Harper & Row, 1978).

A large literature on the 1973 war deals with the concept of intelligence estimates and surprise attacks and is indirectly relevant the debate on deterrence. See Zvi Lanir, *Fundamental Surprise: The National Intelligence Crisis* (Tel-Aviv: The Center for Strategic Studies, 1983); Avraham Ben Zvi, "Hindsight and Foresight: A Conceptual Framework for the Analysis of Surprise Attacks," *World Politics* 28, no. 3 (April 1976): 381-395; Avi Shlaim, "Failures in National Intelligence Estimates: The Case of the Yom Kippur War," *World Politics* 28, no. 3 (April 1976): 348-380.

108. Stein, "Calculation, Miscalculation and Conventional Deterrence," 58.

109. Ibid., 41-49.

110. Ibid., 49-51.

111. On Egypt's strategy in the War of Attrition see Jonathan Shimshoni, *Israel and Conventional Deterrence*, ch. 4; Bar-Siman-Tov, *The Israeli-Egyptian War of Attrition*; Khalidi, "The War of Attrition," and Schueftan, *Attrition*.

112. Schueftan, *Attrition*, and Shimshoni, *Israel and Conventional Deterrence*, ch. 4.

113. Aronson, *Conflict and Bargaining in the Middle East*, 141.

114. Ibid., 146.

115. It was not until 1977 that Sadat's conception of peace came close to the Israeli interpretation which included reconciliation. See Shamir, *Egypt Under Sadat*, 95.

116. Ibid., 93-94.

117. Aronson, *Conflict and Bargaining*, 161.

118. Sadat, *In Search of Identity*, 232, 238; el Badri, el Magdoub, and el Din Zohdy, *The Ramadan War*, 18.

119. Shamir, *Egypt Under Sadat*, 71-85.

120. On Egyptian concerns with their vulnerable interior see Shazli, *The Crossing of the Suez*, 94, 130-131, 144, and Sadat, *In Search of Identity*, 219-221.

121. Schueftan, *Attrition*, 339-351.

122. On Soviet-Egyptian relations see Karen Dawisha, *Soviet Foreign Policy toward Egypt* (New York: Macmillan, 1979); Galia Golan, *Yom Kippur and After: The Soviet Union and the Middle East Crisis* (Cambridge: Cambridge University Press, 1977); Galia Golan, *Soviet Policies in the Middle East from World War Two to Gorbachev* (Cambridge: Cambridge University Press, 1990), and Rubinstein, *Red Star on the Nile.*

123. Yaacov Roi, *The USSR and Egypt in the Wake of Sadat's "July Decisions,"* (Tel-Aviv: Tel-Aviv University, 1975), and Anderson et al, "Explaining Self-Defeating Foreign Policy Decisions."

124. The main elements of a limited-aims strategy can be found in Heykal's writings during the early stages of the War of Attrition, but a concious adoption of this strategy by the Egyptian decision-makers does not occur until after Sadat and his military commander realized that an all-out-war strategy was not viable. For evidence that the building blocks of the limited-aims strategy existed in Heykal's writing see Hassanain Heykal, "The Strategy of the War of Attrition," 414-427.

125. Stein, "Calculation, Miscalculation and Conventional Deterrence," 38-41.

126. Cited in Stein, "Calculation, Miscalculation and Conventional Deterrence," 40, 57.

127. Malcolm H. Kerr, *The Arab Cold War: Gamal Abd al-Nasir and His Rivals, 1958-1970* (London: Oxford University Press, 1971); Dawisha, *Egypt in the Arab World,* and Ajami, *The Arab Predicament.*

128. Yaniv, *Deterrence without the Bomb,* 171; Shimon Shamir, "Arab Attitudes Towards the Conflict With Israel Between 1967 and 1973," 185-199 and, Shamir, *Egypt Under Sadat.*

129. Avner Yaniv, *"Deterrence without the Bomb,"* 138.

130. Stein, "Calculation, Miscalculation and Conventional Deterrence," 40.

131. William B. Quandt, *Decade of Decisions: American Policy Toward the Arab-Israeli Conflict* (Berkeley: University of California Press, 1977), 168, and Heykal, *Road to Ramadan,* 8.

132. Yaniv, *"Deterrence without the Bomb,"* 131.

133. Shazli, *The Crossing of the Suez,* ch. 4, and Badri et al., *The Ramadan War,* 29.

134. Stein, "Calculation, Miscalculation and Conventional Deterrence," 47.

135. Ibid., 43.

136. Ibid., 42.

137. Ibid., 47-48.

138. Ibid., 43-49.

139. Insight Team, *The Yom Kippur War,* 60, 86, and Shazli, *The Crossing of the Suez,* 22-23, 245-246.

140. Egypt was also concerned about Israel's nuclear capability, which posed a serious challenge to the Arab regimes while the conventional balance remained deadlocked. See, Fuad Jabber, *Israel and Nuclear Weapons: Present Options and Future Strategies* (London: Internationa Institute for Strategic Studies, 1971).

141. el Badri, *The Ramadan War,* 19.

142. Ibid., 15, and Insight Team, *The Yom Kippur War,* 60.

143. Stein, "Calculation, Miscalculation, and Conventional Deterrence," 43-49. See also Khalidi, "The War of Attrition," 76-82.

144. Shazli, *The Crossing of the Suez,* 94.

145. Ibid., 116.

146. According to Heykal, "it was a long time before Egypt became ready to accept the idea of a limited attack aimed primarily at opening up political possibilities." See Heyka, *Road to Ramadan,* 167-168.

147. Dina Rome Spechler, "Soviet Policy in the Middle East: The Crucial Change," in Paul Marantz and Blema S. Steinberg, eds., *Superpower Involvement in the Middle East: Dynamics of Foreign Policy* (Boulder, Colo.: 1985), 133-171.

148. Shlaim and Tanter, "Decision Process," 499-516; Heykal, *Road to Ramadan,* 5-6, and Shazli, *The Crossing of the Suez,* 34-35, 58-59.

149. el Badri, *The Ramadan War,* ch. 2; Shazli, *The Crossing of the Suez,* chs. 2-3, and Mohamad el Gamasy, "The Military Strategy of the October 1973 War," in *October 1973 War*, proceedings of an international symposium held on 27-31 October 1975 (Cairo: Ministry of War, 3 October 1976), 31-43.

150. el Badri, *The Ramadan War,* 17-18; Insight Team of the London Sunday Times, *The Yom Kippur War* (Garden City: Doubleday, 1974), 88, and Sadat, *In Search of Identity,* 244.

151. The possibility of an oil embargo, Syrian participation in a two front war and the achievement of strategic surprise were all important factors in Sadat's ultimate decision to go to war. But had the Egyptian leadership not been able to conceptualize the limited-aims strategy in order to offset Israeli superiority, the other factors would not have been sufficient to convince Sadat to go to war. On the economic circumstances which made the use of the oil weapon possible see Anthony Sampson, *The Seven Sisters: The Great Oil Companies and the World They Shaped* (New York: 1976), and Raymond Vernon, ed., *The Oil Crisis* (New York, 1976). On the Syrian involvement see Insight Team, *The Yom Kippur War,* 68

152. Shazli, *The Crossing of the Suez,* 117.

153. Ibid., 117.

154. Ibid., 94, 130-131, 144.

155. Ibid., 119.

156. Fearon, "Deterrence and the Spiral Model," 27-28.

157. Dayan, *My Life,* ch. 28.

158. Stein, "Calculation, Miscalculation and Conventional Deterrence," 49, and George and Smoke, *Deterrence in American Foreign Policy,* 531.

159. Nasser, speech, 27 March 1969.

160. Stein, "Calculation, Miscalculation and Conventional Deterrence," 49-50.

161. Immediately after the Six Day War Israel offered Egypt the Sinai in return for a peace treaty arrived at through direct negotiations. Syria was also offered a similar deal. The only caveat was the demilitarization of these territories. This Israeli offer, made through the good offices of the United States, was good through October, 1968. See Abba Eban, *Personal Witness: Israel Through My Eyes* (New York: G.P.Putnam's Sons, 1992), 492. On the consensus which existed on this point in the Israeli government see Yair Evron, *The Middle East,* 59. Israel's position hardened after the War of Attrition but a serious Egyptian

peace offer would have most probably tilted the balance of forces within the Israeli government toward the forces which advocated territorial compromise in return for peace.

162. On the interim agreement negotiations see Aronson, *Conflict and Bargaining,* 139-154.

163. Ibid., 140.

164. See Sadat's account of his negotiating position see the description of the 11 May meeting in Shazli, *The Crossing of the Suez,* 71.

165. In his response to UN mediator Jarring, Sadat said that Egypt would accept "salaam" but not "sulh." To the Israelis peace as a political settelment in the absence of reconciliation meant that Egypt could abandon the peace agreement if and when circumstances changed. See Aronson, *Conflict and Bargaining in the Middle East,* 143.

166. Ibid., 149.

167. According to Yehoshua Raviv, Dayan's military adjutant at the time, these were the main obstacles to an interim agreement. See Shamir, *Egypt Under Sadat,* 250.

168. Stein argues that Sadat departed from past practice and offered to sign a peace agreement with Israel. See Stein, "Calculation, Miscalculation and Conventional Deterrence," 49.

169. Shamir, *Egypt Under Sadat,* 93.

170. Ibid.

171. Stein, "Calculation, Miscalculation and Conventional Deterrence," 58.

172. Ibid.

173. See his introduction to Shazli, *The Crossing of the Suez.*

174. Badri et al., *The Ramadan War,* 15.

175. Shazli, *The Crossing of the Suez,* 68.

176. For Shazli's description of Egypt's vulnerability see his *The Crossing of the Suez,* 15. Egypt's air force commander, Bagdadi, complained that Egypt did not have a weapon which could threaten Israeli population centers and thus deter Israel from attacking Egypt's interior. Soviet SCUD deliveries in 1973 gave Egypt an appropriate response and was a major element in the decision to challenge. On Sadat's concerns on this matter see his statement during the June 6, 1972 meeting of the Egyptian high command. See Shazli, The Crossing of the Suez, 94, 116.

177. Ibid., 94.

178. Ibid., 116.

179. According to Heykal, "it was a long time before Egypt became ready to accept the idea of a limited attack aimed primarily at opening up political possibilities." See Heyka, *Road to Ramadan,* 167-168.

180. See Shimon Shamir's introduction in Shazli, *The Crossing of the Suez,* 11.

181. On the shift in Egypt's goals and the rise of the forces advocating the disengagement from Pan-Arab politics see Ajami, *Arab Predicament,* 81.

182. Yehoshafat Harkabi, *Arab Strategies and Israel's Response* (New York: The Free Press, 1977).

183. el Badri, *The Ramadan War,* 17; Shazli, *The Crossing of the Suez,* 26-27, 262.

184. Ibid.

185. Cited in Shimshoni, *Israel and Conventional Deterrence,* 211.

186. Adan, "Quality and Quantity in the Yom Kippur War,"; Chaim Herzog, *The War of Atonement: October, 1973* (Boston: Little, Brown and Company, 1975), 233-234, and Heykal, *Road to Ramadan,* 219-220.

187. Successful deterrence does not necessarily lead to peace. The success of deterrence creates the conditions in which challengers are willing to consider other options to resolve the conflict. On the intricate trilateral negotiations which ultimately lead to the resolution of the Egyptian-Israeli conflict and the signing of the peace treaty see Edward R. F. Sheehan, *The Arabs, Israelis, and Kissinger: A Secret History of American Diplomacy in the Middle East* (New York, 1976); and Matti Golan, *The Secret Conversations of Henry Kissinger: Step-by-Step Diplomacy in the Middle East* (New York: Quadrangle, 1976); William Quandt, *Camp David: Peacemaking and Politics* (Washington, D.C.: The Brookings Institution, 1986), and Shibley Telhami, *Power and Leadership in International Bargaining: The Path to the Camp David Accords* (New York: Columbia University Press, 1990).

188. While only Egypt was willing to sign a peace agreement with Israel at the time, it is important to note that this is not a unique case of deterrence success. As a result of the Yom Kippur War, deterrence stability also exists on the Syrian-Israeli front, and the Palestinian leadership adopted the more moderate goal of a two-state solution instead of the replacement of the Israeli state by a Palestinian state.

189. Nasser was under strong pressures to challenge deterrence in another period not addressed in this paper, the 1956 to 1967 period, and he refrained from a challenge because Israel's threat at the time was very credible. See Lieberman, "The Rational Deterrence Theory Debate."

190. "By war, reputation was maintained." Martin Gilbert, *The Roots of Appeasement* (New York: New American Library, 1966), 1. Quoted in Paul Gordon Lauren, "Theories of Bargaining with Threats of Force: Deterrence and Coercive Diplomacy," in Paul Gordon Lauren, ed., *Diplomacy: New Approaches in History, Theory, and Policy* (New York: The Free Press, 1979), 185.

191. This theme is developed more fully in my dissertation. See Lieberman, "Testing Deterrence Theory."

192. Zeev Maoz, "Resolve, Capabilities and the Outcomes of Interstate Disputes," 195-229.

193. Robert H. Frank, *Passions Within Reason: The Strategic Role of the Emotions* (New York: W.W. Norton & Company, 1988), 99-102. For a similar argument see Fearon, "Deterrence and the Spiral Model," ; idem., "Domestic Political Audiences and Escalation of International Disputes" (Paper presented at the Annual Meetings of the American Political Science Association, Washington,

D.C., 2-5 September 1993), 1-28. According to Fearon only costly signals which involve high audience costs, if the defender backs down, and introduce the risk of inadvertent escalation, are credible. Troop movements and mobilization are such acts which introduce risks only resolute actors are likely to undertake.

194. Frank, *Passions Within Reason.*

195. On the erosion of the effectiveness of PGMs in the Yom Kippur War due to the 'learning through battle' capability of the Israelis see, Ori Even-Tov, "The Utility of New Technologies for Conventional Defense," in John F. Reichart and Steven R. Sturn Eds., *American Defense Policy* (Baltimore: The Johns Hopkins University Press, 1982), 366-73.

About the Author

Elli Lieberman is a Research Associate at the Program on International Politics, Economics and Security at the University of Chicago.

He has published two articles in *Security Studies*: "The Rational Deterrent Theory Debate: Is the Dependent Variable Elusive?" in the Spring 1994 issue (*Security Studies*, No. 3, 384-427), and "What makes Deterrence Work? Lessons from the Egyptian-Israeli Enduring Rivalry," in the summer 1995 issue. (*Security Studies*, No. 4, 833-92.

Dr. Lieberman received a Ph.D. in political science from the University of Chicago.

McNair Papers

The McNair Papers are published at Fort Lesley J. McNair, home of the Institute for National Strategic Studies and the National Defense University. An Army post since 1794, the fort was given its present name in 1948 in honor of Lieutenant General Lesley James McNair. General McNair, known as "Educator of the Army" and trainer of some three million troops, was about to take command of Allied ground forces in Europe under Eisenhower, when he was killed in combat in Normandy, 25 July 1944.

The following is a complete listing of published McNair Papers. For information on availability of specific titles, contact the Distribution Manager, Publications Directorate & NDU Press, Fort Lesley J. McNair, Washington, DC 20319-6000 (telephone: commercial 202/475-1916; DSN 335-1916).

1. Joseph P. Lorenz, *Egypt and the New Arab Coalition*, February 1989.
2. John E. Endicott, *Grand Strategy and the Pacific Region*, May 1989.
3. Eugene V. Rostow, *President, Prime Minister, or Constitutional Monarch?*, October 1989.
4. Howard G. DeWolf, *SDI and Arms Control*, November 1989.
5. Martin C. Libicki, *What Makes Industries Strategic*, November 1989.
6. Melvin A. Goodman, *Gorbachev and Soviet Policy in the Third World*, February 1990.
7. John Van Oudenaren, "The Tradition of Change in Soviet Foreign Policy," and Francis Conte, "Two Schools of Soviet Diplomacy," in *Understanding Soviet Foreign Policy*, April 1990.
8. Max G. Manwaring and Court Prisk, *A Strategic View of Insurgencies: Insights from El Salvador*, May 1990.
9. Steven R. Linke, *Managing Crises in Defense Industry: The PEPCON and Avtex Cases*, June 1990.
10. Christine M. Helms, *Arabism and Islam: Stateless Nations and Nationless States*, September 1990.
11. Ralph A. Cossa, *Iran: Soviet Interests, US Concerns*, July 1990.
12. Ewan Jamieson, *Friend or Ally? A Question for New Zealand*, May 1991.
13. Richard J. Dunn III, *From Gettysburg to the Gulf and Beyond: Coping with Revolutionary Technological Change in Land Warfare*, March 1992

14. Ted Greenwood, *U.S. and NATO Force Structure and Military Operations in the Mediterranean*, June 1993.
15. Oscar W. Clyatt, Jr., *Bulgaria's Quest for Security After the Cold War*, February 1993.
16. William C. Bodie, *Moscow's "Near Abroad": Security Policy in Post-Soviet Europe*, June 1993.
17. William H. Lewis (ed.), *Military Implications of United Nations Peacekeeping Operations*, June 1993.
18. Sterling D. Sessions and Carl R. Jones, *Interoperability: A Desert Storm Case Study*, July 1993.
19. Eugene V. Rostow, *Should Article 43 of the United Nations Charter Be Raised From the Dead?* July 1993
20. William T. Johnsen and Thomas Durell-Young; Jeffrey Simon; Daniel N. Nelson; William C. Bodie, and James McCarthy, *European Security Toward the Year 2000*, August 1993.
21. Edwin R. Carlisle, ed., *Developing Battlefield Technologies in the 1990s*, August 1993.
22. Patrick Clawson, *How Has Saddam Hussein Survived? Economic Sanctions, 1990–93*, August 1993.
23. Jeffrey Simon, *Czechoslovakia's "Velvet Divorce," Visegrad Cohesion, and European Fault Lines*, October 1993.
24. Eugene V. Rostow, *The Future of Palestine*, November 1993.
25. William H. Lewis, John Mackinlay, John G. Ruggie, and Sir Brian Urquhart, *Peacekeeping: The Way Ahead?* November 1993.
26. Edward Marks and William Lewis, *Triage for Failing States*, January 1994.
27. Gregory D. Foster, *In Search of a Post-Cold War Security Structure*, February 1994.
28. Martin C. Libicki, *The Mesh and the Net: Speculations on Armed Conflict in a Time of Free Silicon*, March 1994.
29. Patrick Clawson, ed., *Iran's Strategic Intentions and Capabilities*, April 1994.
30. James W. Morrison, *Vladimir Zhirinovskiy: An Assessment of a Russian Ultra-Nationalist*, April 1994.
31. Patrick M. Cronin and Michael J. Green, *Redefining the U.S.-Japan Alliance: Tokyo's National Defense Program*, November 1994.
32. Scott W. Conrad, *Moving the Force:* Desert Storm *and Beyond*, December 1994.
33. John N. Petrie, *American Neutrality in the 20th Century: The Impossible Dream*, January 1995.

34. James H. Brusstar and Ellen Jones, *The Russian Military's Role in Politics*, January 1995.
35. S. Nelson Drew, *NATO from Berlin to Bosnia: Trans-Atlantic Security in Transition*, January 1995.
36. Karl W. Eikenberry, *Explaining and Influencing Chinese Arms Transfers*, February 1995.
37. William W. Mendel and David G. Bradford, *Interagency Cooperation: A Regional Model for Overseas Operations*, March 1995.
38. Robbin Laird, *French Security Policy in Transition: Dynamics of Continuity and Change*, March 1995.
39. Jeffrey Simon, *Central European Civil-Military Relations and NATO Expansion*, April 1995.
40. James W. Morrison, *NATO Expansion and Alternative Future Security Alignments in Europe*, April 1995.
41. Barry R. Schneider, *Radical Responses to Radical Regimes: Evaluating Preemptive Counter-Proliferation*, May 1995.
42. John Jaworsky, *Ukraine: Stability and Instability*, August 1995.
43. Ronald Tiersky, *The Mitterrand Legacy and the Future of French Security Policy*, August 1995.
44. John A. Cope, *International Military Education and Training: An Assessment*, October 1995.
45. Elli Lieberman, *Deterrence Theory: Success or Failure in Arab-Israeli Wars?* October 1995.

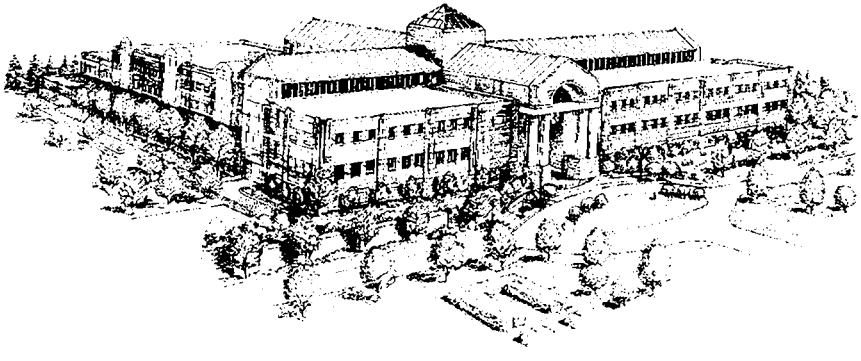
JFQ

JFQ: Joint Force Quarterly is a professional military journal published under the auspices of the Chairman, Joint Chiefs of Staff, by the Institute for National Strategic Studies, National Defense University, to promote understanding of the integrated employment of land, sea, air, space, and special operations forces. ***JFQ*** focuses on joint doctrine, coalition warfare, contingency planning, operations conducted by the unified commands, and joint force development.

The journal is a forum for examining joint and combined warfare and exchanging ideas of importance to all services. ***JFQ*** appeals to a wide audience across the defense community with an interest in the nature and history of joint warfighting.

TO ORDER A SUBSCRIPTION, cite ***Joint Force Quarterly (JFQ)*** and send your check for $21.00 ($26.25 foreign), or provide your VISA or MasterCard number and expiration date, to Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15220-7954. You may also place orders by FAX: (202) 512-2233.

ndu
PRESS



INSTITUTE FOR NATIONAL STRATEGIC STUDIES
NATIONAL DEFENSE UNIVERSITY